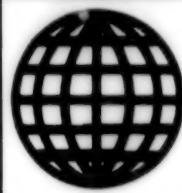


JPRS-TAC-93-019  
29 September 1993



FOREIGN  
BROADCAST  
INFORMATION  
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# ***JPRS Report—***

## **Arms Control**

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# Arms Control

JPRS-TAC-93-019

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### Foreign Ministry Reaffirms Support for Nuclear Testing Ban

HK2009052693 Hong Kong AFP in English 0516 GMT  
20 Sep 93

[Text] Beijing, Sept 20 (AFP)—China on Monday reaffirmed its support for "a complete prohibition of nuclear testing" and added that it had observed a "moratorium exceeding more than a year."

The statement, made public by China's Foreign Ministry, follows accusations by U.S. President Bill Clinton that Beijing is preparing for an underground atomic test in the Lop Nor desert in western China. Clinton, who declared in July a 15-month moratorium on nuclear testing, urged China on Friday to drop the test plans.

Without confirming or denying whether it would conduct the test, a foreign ministry spokesman said: It is known to all that China has all along exercised great restraint of nuclear testing. "China has always supported complete prohibition and thorough destruction of nuclear weapons." Emphasising that the number of tests conducted by China "is the smallest among the nuclear states," the spokesman added: "In fact, we have had a moratorium exceeding more than one year many times."

If the underground test is conducted, it would be the world's first in more than a year.

France, Russia and Britain have pledged to stop nuclear testing. China agreed to take part in talks to be held in January in Geneva on banning atomic testing but has so far refused to state its stand on a halt.

### PRC-Owned Hong Kong Daily Calls For Nuclear Weapons Development

HK2009060693 Hong Kong TA KUNG PAO in Chinese  
20 Sep 93 p 4

[“Political talk” column by Shih Chun-yu [2457 0689 3768]: “Clinton Shows ‘Concern’ for China Again”]

[Text] It is strange, but while the U.S. Government is not resolving a number of domestic problems, including racial conflicts, economic stagnation, worsening social order, and the killing of a foreign tourist, it is fixing its eyes on faraway China with distorted glasses.

### Making People Feel Repugnance

The Yinhe, an ordinary Chinese cargo ship carrying stationary and hardware, was described by them as a ship carrying materials for chemical weapons. Finally, after some U.S. military personnel got on the ship and rummaged through the boxes and cases, it was proved that the Department of State had fallen into the CIA's trap. They described a normal arms deal between China and Pakistan as selling and buying M-11 missiles. Then they threatened and imposed sanctions. But in less than 2 days, they realized that justice was not on their side, so they changed their faces and expressed readiness to

"talk" with China. This ill-disposed "concern" has, of course, ruined the U.S. reputation. It is quite natural that the Chinese feel repugnance to such "concern." Two days ago, Clinton showed his "concern" again for China. He expressed two intentions. First, he wants China "to concentrate its attention" on economic development; second, he hopes that China will not carry out a nuclear test, because "other nuclear countries do not constitute clear threats to China now."

### National Defense Construction Should Not Be Slackened

As everyone is aware, it has been 15 years since China implemented the policy of reform and opening up with economic construction as the central task. It has made world renowned achievements. Even many Americans cannot but acknowledge this. There was no need for Clinton to remind China. The second point is noteworthy. Obviously, the United States wants to interfere in China's efforts to develop nuclear weapons and other defensive forces. The Chinese should never lower their guard against this. History and reality have time and again suggested that a country without defense capability in this hegemonist world will be bullied and humiliated by others. China can never slacken its efforts in building its national defense and armed forces. In developing nuclear weapons, China will strictly keep its international commitments and take quite a restrained attitude, but it should also fully consider its national defense. Some people have miscalculated in forcing China to give up its nuclear development program.

### Threats Against China Really Exist

Clinton said that "other nuclear countries do not constitute clear threats to China now." This is nonsense. Let us keep aside other issues for the time being and take the Yinhe incident as an example. Riding roughshod and "posing as the world cop," the United States has wantonly trampled on international law. Based on fabricated "information," it sent naval vessels and planes to follow and obstruct an ordinary Chinese cargo ship sailing on the high seas. Was this not a threat? Every justice-holding Chinese person can draw a conclusion from the ugly atrocities of these hegemonists, and they hope that in the course of expediting its economic development, China will also speed up the development of its national defense capability to safeguard its sacred sovereignty.

China has clarified time and again that it will never seek hegemony. The people around the world can see that China has no troops stationed abroad, has no military bases, and do not constitute a threat to others. China has no alternative but to develop its national defense capability, but its investment in this respect is quite limited. In 1993, China's national defense budget is only \$7.3 billion, less than 3 percent of the United States', which stands at \$274.3 billion. Calculated on a per capita basis, China's national defense expenditure is \$6, whereas the United States' is \$1,100. Obviously, the fabrication about "China's threat" does not hold water. But they

want to use this to force China to give up its national defense construction. A mere look can lay bare their real intentions.

### **'Yinhe' Cargo Ship Not Found To Be Carrying CW Precursors**

#### **Ship May Have 'Disposed' of Chemicals**

*HK0109145093 Hong Kong AFP in English 1430 GMT 1 Sep 93*

[Text] Hong Kong, Sept 1 (AFP)—The Chinese cargo ship Yinhe, thought by the United States to be carrying chemical weapons precursors, may have gotten rid of them before arriving in the Gulf, a Hong Kong-based news weekly said. In its edition to be published Thursday, the FAR EASTERN ECONOMIC REVIEW said "U.S. intelligence may be paying the price for being slack in its vigil of the Yinhe." The ship is currently being searched for the components of chemical weapons at a Saudi Arabian port.

The Hong Kong-based REVIEW, by "piecing together circumstantial evidence," said it believed the ship was alerted to U.S. interest in the Iran-bound cargo and the "captain managed to off-load the chemicals before reaching the Gulf." It said U.S. intelligence "could confirm" the chemicals were still aboard when the Yinhe stopped in Singapore, but not after. It stopped in Jakarta for several days before sailing toward the Gulf. The report did not say how the chemicals may have been disposed of.

### **Spokesman Says Inspection Shows No Chemicals on Yinhe**

*OW0209074993 Beijing XINHUA in English 0720 GMT 2 Sep 93*

[Text] Beijing, September 2 (XINHUA)—A Chinese Foreign Ministry spokesman said here today that the inspection of the entire cargo on the Chinese ship "Yinhe" loaded at a Chinese port, including that transshipped from Hong Kong destined for Iran, showed that the ship did not carry any of the two chemicals of thiodiglycol and thionyl chloride, thus proving that the repeated statements made by the Chinese side were true.

The spokesman said this at a weekly press conference here this afternoon.

### **Further Report on Inspection**

*OW0309094093 Beijing China Radio International in English to Western North America 0400 GMT 3 Sep 93*

[From the "Current Affairs" program]

[Excerpt] Inspection of the Chinese cargo ship "Yinhe" in Saudi Arabia, which has been the center of controversy for weeks, uncovered no chemicals. That is one of

the main announcements released on Thursday [2 September] at a press conference by Chinese Foreign Ministry in Beijing. (Li Weixuan) was there:

[Begin Li Weixuan recording] Starting last Saturday [28 August], Saudi Arabian inspectors checked the Chinese cargo ship "Yinhe" at their country's port of Dammam. U.S. technical advisers to Saudi Arabia took part in the whole process of the inspection. Foreign Ministry spokesman Wu Jianmin said Chinese representatives were also present. [Wu Jianmin is briefly heard speaking in Mandarin]

He said the inspection covered all the cargo aboard the Chinese ship. The inspection results were that the ship carried neither of the two chemicals the United States has charged were on board. He said the results of the inspection will be officially made public later.

On the issue of the U.S. sanctions against China for the alleged missile parts sale to Pakistan, the Foreign Ministry spokesman said China understands well the commitment it has made in the missile technology control regime [sentence as heard]. Wu Jianmin said the imposition of sanctions against China is nothing but power politics. It has seriously damaged the development of bilateral relations and American economic interests as well. He said it is the U.S. side that should be responsible for all consequences. (passage omitted)

### **Leaves Saudi Arabia for UAE**

*OW0709021993 Beijing XINHUA in English 0204 GMT 7 Sep 93*

[Text] Riyadh, September 6 (XINHUA)—The Chinese "Yinhe" cargo ship left Dammam Port, Saudi Arabia, today for Dubai, the United Arab Emirates, to unload its cargo, after an inspection proved groundless the U.S. accusation that the ship was carrying banned chemicals.

As of July 23, the United States had accused the "Yinhe" of carrying chemical weapon precursors, thiodiglycol and thionyl chloride, bound for Iran. U.S. warships subsequently tailed the Chinese ship on the high seas and its military aircraft took aerial photos of the ship, interrupting the ship's normal navigation.

Since August 2, the "Yinhe" had been forced to drift on the high seas for 24 days, inflicting much suffering to the crew. The ship had to change its course and delay its unloading schedule and this caused heavy economic losses to the Chinese side.

From August 26 to September 4, representatives from Saudi Arabia and China and those from the United States, as technical advisers to the Saudi side, conducted an inspection of the ship in Dammam.

The results of the exhaustive inspection showed that the Chinese ship did not carry at all thiodiglycol and thionyl chloride. The representatives of the three sides signed the inspection report and confirmed the results.

**Full Text of NPC Statement on 'Yinhe' Incident**  
*OW0609172093 Beijing XINHUA in English*  
*1658 GMT 6 Sep 93*

[Text] Beijing, September 6 (XINHUA)—The Foreign Affairs Committee of the National People's Congress (NPC) today issued a statement on the "Yinhe" incident. The following is the full text of the statement:

Beginning on July 23, the United States made groundless accusations against the Chinese cargo ship "Yinhe," alleging that it was transporting chemical weapon precursors, thiodiglycol and thionyl chloride, to Iran. It sent warships and military aircraft to harass the ship on the high seas and wilfully spread slanderous rumors. As a result, the "Yinhe" could not call at scheduled ports to unload its cargo. What is more, the United States stubbornly refused to accept the clarifications made by the Chinese Government on the basis of a serious and responsible investigation into the matter, and insisted on having its own way. The complete inspection of the ship in Damman, Saudi Arabia, has shown that the "Yinhe" was not carrying at all the two chemicals as alleged by the United States. Thus, the U.S. scheme has ended in failure before the ironclad facts.

In this incident, the United States grossly infringed upon China's sovereignty and violated the right to freedom of navigation on the high seas and brutally trampled on international law and the norms guiding international relations. It also seriously damaged China's reputation and caused heavy economic losses to China. The Foreign Affairs Committee of the NPC is greatly indignant at and strongly condemns the hegemonic acts of the United States, and fully supports the strong protest lodged by the Chinese Government on August 7 at the U.S. side and the statement it issued on September 4. The Committee strongly demands that the U.S. side take immediate steps to remove the adverse consequences of its false intelligence, make a public apology to the Chinese side and compensate for all the economic losses sustained by China.

Recently, U.S. Government officials as well as some congressmen have on quite a number of occasions expressed their wish to improve and develop Sino-American relations. However, they must be well aware that requires more trust by the U.S. in other countries and no more trouble-making to the Sino-U.S. relations. The United States must change over to new ways, abandoning hegemonism and power politics, undertaking to abide by international law and the norms governing international relations in future international contacts and guaranteeing not to let similar incidents occur again.

The Chinese people have all along attached importance to the Sino-U.S. relationship and is always ready to maintain and develop the friendly relations with the American people. But they will never allow anyone to

infringe upon China's sovereignty and its rights and interests, and to tarnish China's dignity and its international reputation.

**Official Greets Inspection Team on Return**  
*OW0909111893 Beijing XINHUA in English*  
*1048 GMT 9 Sep 93*

[Text] Beijing, September 9 (XINHUA)—A Chinese inspection team for the cargo liner "Yinhe" headed by Sha Zukang, deputy director of the Department of International Organizations and Conferences, returned here from Saudi Arabia today.

Vice-Foreign Minister Liu Huaqiu, greeting the team at the airport, said that the "Yinhe" incident shows that new hegemonism and power politics are unpopular and is doomed to failure.

The team was also greeted at the airport by officials from the Ministries of Transportation and Chemical Industry and China's General Administration of Customs.

Liu said that the Chinese team members have preserved the dignity of their motherland by successfully accomplishing their task after surmounting numerous difficulties.

He added that their sense of responsibility as well as harmonious cooperation with the Saudi inspectors are praiseworthy.

Over a period of 40 days the members experienced unimaginable troubles and difficulties, fearless of the ships and harassing from the air, the vice-foreign minister said.

The team, which left China on August 24, together with representatives of the Saudi Government conducted an inspection of the "Yinhe" ship. The finding of the joint inspection showed that the ship did not contain dangerous chemicals, as was alleged by the United States.

**Foreign Ministry Charges US of Spreading Rumors**  
*OW0909091693 Beijing XINHUA in English*  
*0904 GMT 9 Sep 93*

[Text] Beijing, September 9 (XINHUA)—A Chinese Foreign Ministry spokesman today charged the U.S. with spreading rumors that lack basic human knowledge and sound like "superman stories."

The spokesman, Wu Jianmin, made the comment at a press briefing when asked to respond to the allegation that the "Yinhe" cargo ship carried chemical weapons precursors, but unloaded the chemicals before the ship was searched.

Although the truth of the Yinhe incident has been thoroughly revealed, the United States is still spreading rumors to cloud the facts. This approach can only make America's mistakes more conspicuous, Wu said.

"I'd like to mention in passing that these rumors are stupid. They lack basic human knowledge and sound like superman stories. We have no superman." [For prior information on the Yinhe situation, see the Arms Control Report of 7 September 1993, pages 1-4.]

### **Rocket Builders 'Ready for Joint Projects'**

*PM1309162593 Moscow IZVESTIYA in Russian  
11 Sep 93 First Edition p 15*

[Boris Konovalov report: "Chinese Rocket Builders Ready for Joint Projects With Russia"]

[Text] Beijing—The system of academies is widely developed in China's defense sectors. I have visited one of five aerospace industry academies which specializes in rocket building.

But, despite the undoubtedly progressive nature of such a structure, within the walls of the academy I recalled our recent past, when the Union kept absolutely everything secret—everything necessary and unnecessary.

There is a museum of cosmonautics outside the academy fence. China is conducting active space research, and 32 satellites were launched last year. Exhibited in the museum is a working model of the launch of a "Long

March" rocket, and the rocket itself is full-size. But...photography is not allowed. A secret project. Although the PRC is trying to break through to the world market with this rocket.

It is not having much success at present. Hopes for commercial launches have not been fulfilled. They seem to be taking the sad experience of our rocket industry into account. As in our country, conversion is taking place here. For example, I was shown an automatic line for the tobacco industry which rocket builders have created.

But even though Chinese rocket building is now experiencing funding difficulties, the PRC is not abandoning its ambitious plans to create more powerful rockets and make a manned flight.

"Rocket technology in China came into being with the help of Soviet specialists at the time of our 'special relationship,'" Prof. Li Jianzhong, vice president of the Academy of Rocket Building, told me. "Then we relied on our own resources, and we remain true to this principle even now. But we strive to imitate all the best things in advanced countries. Russia and China are great countries which need cosmonautics. We are ready for joint projects."

## AUSTRALIA

### Firm Signs Agreement With Russia To Build Spaceport in Papua New Guinea

#### First Wholly Commercial Space Facility Planned

*BK1609073093 Melbourne Radio Australia in English 0500 GMT 16 Sep 93*

[Text] A Queensland firm has signed an agreement with some Russian enterprises to develop a Papua New Guinea [PNG] space base which will launch Russian rockets. (Ian Keen) reports Space Transportation Systems has announced the agreement in Moscow.

[Begin (Keen) recording] Space Transportation Systems is headed by Former Queensland Premier Michael Hearn. It says it now has the exclusive right to develop the launching and technical complexes at what's planned as the world's first private space port. Under the agreement, the Russian side will develop the necessary design and operational specifications for the complexes. It will also supply the Proton launch vehicle and the space booster. The Queensland company will provide the project's general management and market and operate the space port. A senior Russian official, at the

announcement, said it's the first time Russian enterprises will take part as separate legal entities without any subsidy from the state. [end recording]

#### Russian Radio Report

*LD1509120793 Moscow Radio Moscow World Service in English 1100 GMT 15 Sep 93*

[Text] An agreement has been signed on Russian and Australian organizations cooperating in setting up an international space port in the equatorial part of the Pacific. This was announced at a news conference in Moscow today. The preliminary cost of the project is believed to be about \$900 million. Under the agreement, the launching of commercial satellites is to begin in 1998.

Among the Russian participants of the project are such well known firms as Glavkosmos and the Energiya research and production association.

The geographical location of the future space port and the potential of the Russian rocket carrier Proton will make it possible to put on earth orbit satellites weighing up to 5 tonnes.

**CROATIA****Activities of Military Institutes, Connection to War Machine Profiled**

AU2009091593 Zagreb DANAS in Serbo-Croatian  
7 Sep 93 pp 23-25

[Article by Edvard Popovic: "Between the Computer and the Club"]

[Text] An anecdote from the fall of 1991 is a good illustration of the inadequate contribution of scientists to the war for the homeland. Namely, a young scientist from the Rudjer Boskovic Institute was drafted into an artillery crew where, helping a soldier in charge of connections, he was doing a job that did not require the title of a scientist—he was unrolling reels of cable. We do not claim that this case is part of the strategy of the Ministry of Defense of the Republic of Croatia, but the fact remains that the contribution of some intellectuals dealing with war technology to this war is sometimes even smaller than the contribution of the mentioned scientist. And this is not the fault of the scientists.

In the former Yugoslavia, the military institutes, as part of the military-production sector, gathered the most scientists who were improving the old and developing new combat systems. There were some 15 such institutes (10 of which were in Belgrade), three of them the most prominent for their equipment: the Shipping Institute in Zagreb, the Aviation-Technical Institute [VTI] in Zarkovo, and the Military-Technical Institute of the Land Forces [VTI KoV] in Kataniceva Street in Belgrade. Behind each combat system were a team of scientists and years of work. The problem is that the use of these, sometimes perfect, machines is not up to their creators, but very often to people who do not even understand the mechanism of a club. Something similar happened in this war. The military institutes located in Serbia, still united by the Federal Management of Trade [SDPR], are still the scientific force behind the Serbian war machine. All the knowledge necessary for waging a war is stored there, that is, the documentation of each product of the military industry manufactured on the territory of the former Yugoslavia.

**The Warehouse of Knowledge**

The VTI KoV "stores" all the knowledge necessary for the production of weapons and equipment for the land forces. At a certain time, the institute had an unlimited budget for financing research; for instance, the first computer in the former Yugoslavia, CER 1, was made for the use of VTI KoV. The Institute of Technology, where powders and explosives were researched and developed, is part of the above-mentioned institute. The VTI in Zarkovo is certainly the best equipped institution for scientific work in Serbia. Much has been invested in it; for instance, they have seven wind tunnels, the equipment and size of which was often compared to the ones owned by NASA. Namely, a country's competence

in the development of airplanes is measured by the size and quality of wind tunnels, that is, by how large a model can fit into it and what flying speed it can simulate. The VTI has tunnels into which a full-size plane can fit (for instance, a plane type Seagull), and in which take-off and landing speeds are simulated. They also have supersonic and hypersonic tunnels, in which artillery missiles and rockets are tested at speeds of Mach 5 or Mach 7. They also have centrifuges where, in cooperation with the Military-Medicine Academy [VMA], various strains on the pilot's body are simulated. Namely, the problem of the physiology of flight is the problem of man—it is possible to produce a plane that will turn in a radius of 100 meters, but the pilot would not survive. The VTI has, since it was founded, brought about a dozen planes to the prototype phase, but they were not made part of armed forces because there was a gap between the scientific level of the experts and the technological level of the industry that was supposed to produce them. The following goes to prove further that the VTI is very important, being the successor of the long Serbian tradition in aerodynamics. Having conquered Zarkovo, the Germans captured the prototype of the IK-3 plane and its builder Kosta Sivcev. Later on, through comparative analysis, they established that it was better than the famous German Messerschmidt. As today, they were then not able to produce what they had constructed due to the insufficient technological level of industry.

In discussing the military institutes in Serbia, the unavoidable institution is the Institute for Scientific and Technical Information and Documentation [INTID], which was for a while independent, and later under the VTI KoV, but always closely connected to all the institutes and always collecting information, the legal way, about every segment of the military industry, however insignificant some of them may have seemed. The INTID is namely either subscribed to or follows all the major international magazines and books dealing with military matters. If we consider that over 90 percent of contemporary espionage boils down to keeping up with various publications, it can be assumed that there is a link between the INTID and the Serbian information service.

The Belgrade Faculty of Mechanical Engineering is not a typical military institution, but there is a department of military mechanical engineering at which, in cooperation with the Faculty of Electrical Engineering and the Faculty of Chemistry and Technology, top experts for the VTI KoV and other military institutes are educated. Nearly half of the faculty's full-time professors and assistant professors hold high military ranks (for instance, the chief of department for motor vehicles is at the same time chief of the sector for combat vehicles at the VTI KoV) and it is often unclear which institution pays them. The faculty is extremely well-equipped—in the basement there is a perfectly insulated ballistic laboratory in which jet engines and various weapons are tested, without as much as a sound "leaking" out.

### All Is Not Perfect After All

The Boris Kidric Institute in Vinca, at which a nuclear bomb was being developed at a time (Aleksandar Rankovic was behind the project) [high Communist Party official until 1966 when his activities were condemned as antiparty and antidemocratic, and he was excluded from the party as a state socialist-bureaucratic element], at present deals with high technologies for future generations of combat systems. If it can be said that military institutes deal with operational science, then the institute in Vinca deals with fundamental science. Among other things, they deal with composite materials and fuels, high-strength steels, and, in general, materials used in the production of weapons. In the area of electronics they are almost up to the world trends. Our source claims that at present they are capable of producing almost any component for a modern computer—not serially, but only one, unique specimen.

Despite all that has been listed, and this is only a minor part of the military institutes, matters are not all that perfect. There is always a catch of some kind. In this case, the catch is the experts employed at the institutes. In the past 10 years the trend was to employ somebody's children, which mainly related to the children of the federal and republic power wielders, and the children of generals, which greatly diluted their scientific potential. From development-research institutes, they turned into development-managerial institutions, slowing down the logical development of the former Yugoslav National Army [JNA]. This primarily relates to new, more sophisticated technologies. The consequence of such policy was turning to foreign markets—licenses were bought uncontrollably and great debts were created, which caused the additional numbing of scientific work and the experts leaving the former Yugoslavia. Moreover, as one of the prominent scientists (at present a retired general who, luckily, stayed in Zagreb) had pointed out at the time, the development was also being slowed down by the "division of the scientific cadres, the equipment and resources among the universities, which generally had no equipment, and of many scientific institutes and industries in which the smallest number of scientific-research cadres were employed," which resulted in "being in a cocoon, hair-splitting, and a bad connection between scientific institutions and industry." The development of the plane, which was at a time to be a monument to General Kadijevic, is also not unimportant; having swallowed considerable amounts of money, it slowed down the development of other army branches. The catch also lies in the disproportion of knowledge and technological possibilities. Serbia is, namely, not well-off with new technologies and modern combat systems. What it can produce, and it does, is huge quantities of conventional weapons, which is, in the war that it is waging, quite sufficient.

### The Vukovar Experience

Can Croatia, with this monster with which it is at war, sleep well at night? It could, if it were to activate all of its

own potentials, whether it concerned economy, that is, industry, or the intellectual (expert) potential. As an illustration of its potential we can use the experience of Vukovar communicating with Vinkovci and Djakovo. With the aid of computers and radios, they established the connection with these cities that the Serbs could not "break into," and they probably do not know what it is about even now. The later rummaging through the command post and questioning of the Croatian soldiers who were captured in the concentration camps did not help either, as the creators of this communications system (among who was a telecommunications engineer) had escaped in the breakthrough. At present, the system is being further improved, and it has been practically applied in many places.

It is therefore necessary that someone collect all the scattered knowledge, define the needs of the Croatian Army as concerns weapons, equipment, and cadres, and finally start working in an ORGANIZED [previous word printed in capital letters] way. The absence of a clear strategy may have been tolerated at the beginning of the war. At present it is incomprehensible, displaying ignorance, or worse, lack of willingness to work. It is incomprehensible that, for instance, the ones who should know still do not know (or do not want to know) that Croatia "got" some 40 top experts out of the former Ivan Gospnjak Military Academy only, people who are more valuable than the equipment of any laboratory, and are now left to the decisions of those who "reach for their guns" at the mention of the word "science." There is also the system of educating the commanding cadres and the cadres in expert branches and service, without which it is impossible to imagine any army, let alone a modern one, toward which, judging by the verbal incidents coming "from above," we are striving! In the fall of 1991, the expert team had drawn up a proposal for the education system for the officers of the Croatian Army [HV] ("The proposal may not be perfect, but it can be a good starting point for a discussion," says one of the authors), and since then, apart from the 6-month courses, which are a good short-term solution, not one cadet has crossed the threshold of the Croatian military educational institution, as it does not exist. And if the Serbian problem can be reduced to the disproportion of knowledge and industrial potentials, things are much graver in Croatia. This is a matter of the disproportion of the expert-scientific and industrial potential on the one hand, and the knowledge of those who are paid to organize the defense of the country at all levels on the other. This hence ceases to be the problem of one minister, one ministry, or the Government of the Republic of Croatia. This is the problem of the entire state management.

[Box, p 25]

### The Secret Activities

The activities of the Institute for Security [IS] at the Serbian Ministry of Internal Affairs are almost completely opaque. The public received information concerning the activities mainly indirectly, and they

"leaked" slowly. Not without reason—all the dirty work was the specialty of the IS, and it continues to do business with all the major capacities, as opaque as ever.

It was founded after 1971, when it was decided that the retribution of the Yugoslav information service of the time on the protagonists of the Croatian Spring was not as efficient as it was supposed to be. The staged retribution on the [word indistinct] group from Australia fully displayed the inefficiency of the military-police forces, so the IS was founded as part of the new special police troops, developing combat systems for them.

One of the sectors dealt with developing poison gasses—from the "soft" ones for breaking up demonstrations to the combat ones. The variant of multiple rocket launchers with poison gasses was tested in Macedonia. Only cattle grazing at the pastures near the test range was killed. The poisoning of the children at Kosovo, which shocked the public at the time, can probably be ascribed to that sector too, that is, to a substance they were currently testing, as they are now testing the improved combat systems on Croats and Muslims.

The IS bears the credit for the existence of the so-called Bulgarian umbrella, the weapon that the Bulgarian information service used in retribution on their dissidents.

This is an umbrella from which a tiny arrow or a ball filled with poison is fired. The pain is negligible, similar to a mosquito bite, but the victim has no chance of surviving. One of the laboratories in which these poisons were produced was also in Mostar.

The sector for shooting weapons developed special guns and pistols, silencers, and high-efficiency ammunition. Namely, the problem of every police force is how to disable the right person with the first shot and avoid that the bullet pass through the body of the person shot, and hit several more tax-paying citizens. The IS was working on the development of such ammunition in cooperation with the VTI, which intensified in the past 10 years. Among other things, they developed a bullet that is a copy of the English Manstopper, for the needs of the Serbian police at Kosovo. When it hits a person, the bullet suddenly brakes, with the lead point expanding and splitting, thus causing the irregular breaking of tissue and horrible wounds. They also developed the hypersonic bullet for Magnum 357. This ammunition does not flash, and the sound of the shot is not heard.

As far as the "long barrels" are concerned, they developed and produced heavy, 0.5-inch sniper guns, with a range of 1,200-1500 meters.

## OMAN

### Sultan Decrees Signing of Chemical Arms Ban Treaty

*JN1109162193 Muscat Radio Oman Network in Arabic  
1300 GMT 11 Sep 93*

[Summary] Sultan Qabus Bin-Sa'id has decreed that Oman will sign the treaty banning the introduction, production, stockpiling, and use of chemical weapons. The decree commits Oman to the destruction of such weapons.

## REGIONAL AFFAIRS

## Developments in Russian-Ukrainian Negotiations on Nuclear Weapons

## Yeltsin Departs for Ukraine

*LD0309090893 Moscow Ostankino Television First Channel Network in Russian 0800 GMT 3 Sep 93*

[From the "Novosti" newscast]

[Text] Our report on Boris Yeltsin's departure by air for the Crimea is ready and here it is:

[Unidentified speaker] The Sevastopol issue will be the most difficult question to be tackled during the coming meeting between the Russian and Ukrainian presidents, journalists were told by Russian President Boris Yeltsin before his departure. And this is his reply to a question about whether he is worried that the results of the talks on Sevastopol will cause more tension between the president and parliament:

[Begin Yeltsin recording] Maybe we will reach an agreement with Kravchuk and the parliament, too, right? [end recording]

The president said that bilateral relations, including economic relations, will also be discussed at the meeting between the two state leaders. Apart from this, the president will discuss questions connected with the Black Sea Fleet and the strategic nuclear forces.

[Begin Yeltsin recording] We cannot, nevertheless, allow Ukraine to be a nuclear power. That is why we wish to reach a final agreement on removing, destroying, and eliminating the missiles, the strategic nuclear weapons. These are the three main areas that will be discussed today. [end recording] [video shows Yeltsin shaking hands with Kostikov, officials including Kozyrev looking on]

## Ukraine To Disarm, Transfer Weapons to Russia

*AU0309140593 Paris AFP in English 1352 GMT 3 Sep 93*

[Text] Yalta, Ukraine, Sept 3 (AFP)—Ukraine agreed Friday to dismantle its nuclear weapons and transfer them to Russia. Russian President Boris Yeltsin told a press conference here.

All Ukrainian missiles will be dismantled and removed to Russia, making it the sole nuclear power in the Commonwealth of Independent States, Yeltsin said after talks with his Ukrainian counterpart Leonid Kravchuk.

The missiles will be dismantled by Russia.

Ukraine has come under strong pressure from Russia and the West to give up its nuclear weapons and ratify arms treaties signed by the United States and the former Soviet Union.

Russia will compensate Ukraine for the missiles by providing unenriched uranium for civilian nuclear use.

## Further on Agreements

*LD0409064993 Moscow ITAR-TASS in English 0638 GMT 4 Sep 93*

[Text] Moscow September 4 TASS—Russia and Ukraine have signed three agreements on the utilisation of nuclear weapons and control over strategic missiles stationed in both republics.

The agreements were signed by Russian Prime Minister Viktor Chernomyrdin and his Ukrainian counterpart Leonid Kuchma who accompanied the presidents of the two countries to the summit meeting held in the Crimea on Saturday [as received].

The signed documents include an agreement on utilisation of nuclear warheads, basic principles of utilisation of nuclear warheads from strategic missiles stationed in Ukraine and an agreement on control over exploitation of strategic missile complexes deployed in Russia and Ukraine.

## Russian Defense Minister Comments

*LD0409151393 Moscow ITAR-TASS World Service in Russian 1320 GMT 4 Sep 93*

[By ITAR-TASS military observer Andrey Naryshkin]

[Text] Moscow, 4 Sep—The leaders of Russia and Ukraine signed "a package of documents necessary for guaranteeing nuclear and ecological safety in the use of nuclear weapons situated on the territory of Ukraine" in the Crimea on Friday, Russian Defense Minister Pavel Grachev, stated at a news conference today. This package includes "the basic principles for recycling [boyezaryad] nuclear weapons of the strategic nuclear forces stationed in Ukraine," an intergovernmental agreement "on recycling nuclear weapons" and an agreement "on the procedure for carrying out the guaranteed and signatories [avtorskiy] inspection on the use of strategic missile complexes."

In accordance with these documents, he said, "all warheads of strategic nuclear weapons are withdrawn to Russia's territory, and are recycled at Russian enterprises. The Ukraine receives either rods for reactors of nuclear power stations, or a proportion from the sale of low-enriched Uranium. Naturally, Russia's expenses will be taken into account for the dismantling, transportation, and processing of the warheads."

"Our accords on the recycling of these weapons will be a gesture of goodwill, designed to clear away the problem of ratification of the START I Treaty in the Ukrainian Supreme Council," Pavel Grachev said.

In his opinion, the signing of these documents, "will lead to a qualitatively positive change for the better in the development of the situation around nuclear weapons."

and the whole set of international problems that have arisen in connection with this. They are in the interests of the Ukraine and Russia, and lead not only to the untying of one of the most serious knots of contradictions between our states, but also to strengthening of their positions in the world community," the head of the Russian War Department stressed.

Replying to the ITAR-TASS observer's question as to whether the Ukrainian Supreme Council's decision on "administrative control" of the nuclear forces stationed on its territory will remain in force, Pavel Grachev said: "The Ukraine confirms all the statements made earlier on this subject and is not renouncing a single one of them."

In his turn, Colonel-General Yevgeniy Maslin, head of the 12th Main Directorate of the Russian Federation Defense Ministry, said in reply to a question by the ITAR-TASS correspondent on the schedule for dismantling and transporting nuclear weapons to Russia: "The work will be carried out according to a schedule that the prime ministers of Russia and Ukraine plan to draw up and approve soon." He stressed that at issue were weapons installed both on liquid-fuel and solid-fuel missiles. Weapons whose service life has expired will be dismantled first.

The Russian side considers that 17 months will be sufficient to remove the warheads from Ukrainian territory and completely reprocess them. The fear of remaining, after the warheads have been dismantled "one by one," with the problem of the carrier-rockets, which some of the Ukrainian military are expressing, is completely groundless, Col-Gen. Maslin considers. Once the warheads have been dismantled, it is possible to place equivalent ones on the missiles, and carry out inspection and servicing work for a considerable period. "The world is worried about the nuclear weapons that now exist in Ukraine, even on missiles that are not being properly maintained," he pointed out.

Developing this theme Pavel Grachev stressed that the Russian side was prepared to help Ukraine with the recycling of carrier rockets and rocket fuel.

#### **Yeltsin Interviewed on Talks With Kravchuk**

LD0409171293 Moscow Russian Television Network  
in Russian 1622 GMT 4 Sep 93

[Interview with Russian President Boris Yeltsin by Russian TV correspondent Boris Belov and unidentified OTV correspondent in Moscow on 4 September—rounded]

[Text] Belov: Boris Nikolayevich, an accord was reached on the Black Sea Fleet yesterday. None of the previous accords have been fulfilled, in one way or another. What are the guarantees that this latest accord will be fulfilled?

**Yeltsin:** The latest accord is linked with financial issues, with Ukraine's debt to Russia. Three matters were discussed: the debts, the Black Sea Fleet, and nuclear weapons.

On the first issue, that of the debts, we did not reach any accord, since Ukraine is unable to pay its debts. This was suggested: Why don't you give up your part of the Black Sea Fleet, so there will be a Russian Black Sea Fleet, and we will cancel the debts. Perhaps it will be less; perhaps it will be more. That will have to be figured. According to our calculations, however, we will not lose out. We will have our fleet, however, with the appropriate base in Sevastopol—the material and technical base, the repair base, the workshops, the social and cultural amenities—everything necessary for the life and activity of the fleet.

Sevastopol will be the naval base of the Black Sea Fleet, with all that follows from that. According to the treaties, everything—absolutely everything—will be utilized, from production works and buildings, to housing and social and cultural amenities.

We will, of course, be making an appropriate contribution to this infrastructure, which will be essential. At the same time, however, we will be providing jobs for the Crimea, which is currently going through a very difficult time—in particular, at its repair factories.

There was also, I would say, a breakthrough regarding nuclear arms. As far as Belarus and Kazakhstan are concerned, we have long-standing agreements with them. There are no problems there. There have been problems with the Ukraine, and we have agreed on compensation in the form of unenriched uranium in the quantity that they transfer to us as nuclear warheads. Our specialists will dismantle these warheads, transport them, and recycle them appropriately at our factories.

The United States is helping us with this. Four hundred million dollars have been earmarked from the budget and approved by Congress to separate the plutonium and uranium and later give the unenriched uranium back to the Ukraine for its nuclear power stations.

All documents concerning this problem were signed yesterday. We consider the affair closed. For us, there is nothing left to clarify.

[Yeltsin, continuing] There is a timescale, and there is the matter of how to do it in technical terms—how to transport and destroy them and at what speed—absolutely everything. As regards compensation for tactical weapons, we have already destroyed them and we did not have such a compensation agreement in the past.

[Unidentified Ostankino TV correspondent] Boris Nikolayevich, I am from the Ostankino Television and Radio Broadcasting Company. Your decree temporarily removing the vice president and the first vice premier is the subject of very vigorous debate. What is your view of the present situation?

**Yeltsin:** I believe the decree was necessary and unavoidable in the current climate. There are documents, and in order for the administrative bodies—the procuracy and the investigators—to sort the matter out once and for all they were temporarily removed from their posts, in strict accordance with the Constitution and with the law on the president. They have not been dismissed from their posts but temporarily removed while the investigators and the procuracy carry out their work.

Therefore, I regret that the Supreme Soviet made its decision yesterday. It shows that the Supreme Soviet does not know either its own Constitution or the law.

**Belov:** One more question, if I may. It is about the future of the summit meeting of the CIS states.

**Yeltsin:** The fact is that this issue is being discussed by the Ukrainian Parliament, and Leonid Makarovich Kravchuk asked firmly that the heads of state meeting not be held until this issue is discussed, even though absolutely everybody has agreed. However, it has been postponed from the 7th to the 24th [September]. Everybody was consulted and they agreed. I think it will be a very serious meeting connected with the economic union.

**Belov:** Thank you.

**Yeltsin:** Thank you and goodbye.

#### Kravchuk Interviewed on Talks With Yeltsin

LD0409103893 Kiev UNIAR in Ukrainian 0730 GMT  
4 Sep 93

[Interview with Leonid Kravchuk, President of Ukraine, at Borispol airport following his return from talks in Yalta with Boris Yeltsin, president of the Russian Federation—UNIAR headline]

[Excerpt]

**Question:** Was the issue of nuclear disarmament discussed?

**Kravchuk:** This is the only one of the issues, which we have already resolved, that is, which we signed. The essence of it is that Russia has agreed, first, to compensate Ukraine for nuclear substances (enriched uranium). As for the servicing of our strategic missiles, which are located on Ukraine's territory, we have resolved this with Russia. We clarified all of the time periods. An absolutely normal decision took place, which meets Ukraine's and Russia's interests. But for us scrapping is a question, which we will be resolving and studying and raising with the United States and other states. That, which I spoke about before, the setting up of a nuclear disarmament fund - this issue has not yet been taken off the agenda. We will ask and insist, and demand, if it has gone that way, that Ukraine be assisted in resolving the whole range of issues.

Nothing has changed in that Ukraine will still have half of the fleet and everything else. After all, we did not finance this decision [as received]. That is, Russia has recognized Ukraine's right, just as we have recognized Russia's right, to half of the fleet. Only one thing is changing: what are we going to do with our half. Can we, for example, today maintain 300 ships. Naturally, we cannot. One way or another we have been raising this issue for a long time. We will either be writing off or selling part of the ships, both according to their age and according to the tendencies of their utilisation. If we sell this to Russia, and not to another state, is this some kind of concession? No, I do not see absolutely any concessions in this. The issue has only been raised of possible utilisation of our property, the infrastructure of the fleet, which will remain there. This issue will also be studied, and after it has been studied it will be resolved. That is, we are going for further deepening of this issue, for taking into account the true situation. After all, we are taking into consideration the interests of Ukraine as a whole, and not only of the Black Sea Fleet.

**Question:** Aren't you afraid of the opposition?

**Kravchuk:** If you fear the wolf, you shouldn't go into the woods. The opposition exists to criticize the authorities. And the authorities exist to protect Ukraine, and to view Ukraine not from the point of view a ship, but from the point of view of 52 million people, its regions, to live, have good relations with Russia, to receive energy-carriers normally, and find the money to pay. If we were a little richer today, and if all together we, the Supreme Council, the president, and above all the government, had brought Ukraine to wealth, and if we went to the Crimea today, having at least a billion dollars in our bank account, then the opposition could speak louder. But now we have to consider our realistic possibilities, think about Ukraine as a whole, and not about an individual question.

**Question:** What can you say about the statement by Leonid Kuchma regarding his resignation.

**Kravchuk:** You ask Kuchma about this, because I have not discussed this issue with him.

#### Joint Press Conference

AU0809172193 Kiev HOLOS UKRAYINY in Ukrainian  
7 Sep 93 p 2

[Excerpt from the news conference held by Russian President B. Yeltsin and Ukrainian President L. Kravchuk in the Crimea after 3 September 1993 negotiations: "Ukraine Might Consider Selling a Certain Part of the Fleet...."]

[Text] **Question:** Were the previous decisions concerning the Black Sea Fleet erroneous or correct? Have you done anything toward resolving this question?

**Yeltsin:** We have embarked on a somewhat different road toward resolving this problem, which has been long

outstanding. The previous decisions were correct for that time, but they did not produce the necessary result. They did not normalize the situation in the fleet. That is why this question was discussed today, and I am sure that the discussion will end in the following way: Ukraine will transfer its entire Black Sea Fleet to Russia. Russia will compensate for the cost of one-half of the Black Sea Fleet that belongs to Ukraine in accordance with previously adopted agreements. As regards the base, and in accordance with international rules, the base and what is necessary for the Russian Black Sea Fleet will also be used by Russia on the basis of agreements with towns, rayons, and settlements.

**Kravchuk:** I also want to comment on this question. The two documents on the Black Sea Fleet that we signed earlier were dictated by time and place, and one should not discuss whether or not they were correct. They did not produce results because during the discussion and adoption of the documents, the real situation was not completely addressed; the opinion of the Black Sea Fleet was not considered, neither were the points of view of Sevastopol and the Crimea, but they [the Crimeans] will have to live here, work, and ensure their participation in these intricate and difficult procedures.

Our approach today went as follows: We divided the question into two parts—the fleet and the base. As concerns the fleet, after we reached the agreement, a mixed Ukrainian-Russian commission was created. It is made up of financiers and lawyers and will specify all aspects of the problem because it is a matter of the following: One half of the fleet is Ukrainian and one half is Russian. Ukraine [begin bold] may consider the question [end bold] of selling a certain part of the fleet to Russia—a part yet to be determined. This is the first question. The second is the use of the Sevastopol base by the Russian fleet. The commission will also decide on this on the basis of existing international acts. After this (we set the deadline—September), the commission will complete its work, and we will ultimately resolve this problem.

**Question:** Was the question of improving economic cooperation between Ukraine and Russia discussed? Was the question of the Ukrainian debt to Russia resolved?

**Yeltsin:** We have not yet found a way out of the question of Ukraine's debt to Russia. This applies both to the debt of 1992 and to the debt of 1993, as well as to current settlements—so far, we have not found a solution to this problem. If we look at the problem with the Black Sea Fleet and if this question is tackled, Russian compensation for that part of the fleet that is to be transferred from Ukraine to Russia will be used to cancel Ukraine's debt. If it is less than the balance for that part of the fleet, Russia will pay the difference.

**Kravchuk:** I confirm that after itemizing everything in the fleet and the base, their cost will also be determined according to international practice. If the cost is higher,

Russia will pay and if it is lower—Ukraine will determine how much it must pay.

**Question:** Did you, the two presidents, estimate approximately how much this farming out of the fleet will cost Russia or Ukraine? Have you definitely agreed on whether or not Russia is buying the fleet back?

**Yeltsin:** We agreed that Russia is buying it and we, of course, know the full balance price of the Black Sea Fleet and how much one-half of it costs.

**Kravchuk:** We only know this regarding the fleet. We do not have a complete knowledge of, at any rate I do not know the international principles, norms, and rules for using the base. Because, I reiterate, we have divided this into two parts: the problem of the fleet and the problem of the base.

**Yeltsin:** In order to arrive at a common opinion of the sum, the joint commission was created. It will work in September and must, by the end of the month, produce the full estimate.

**Question:** Were strategic nuclear weapons issues discussed?

**Yeltsin:** Yes, and we have fully agreed on it: The premiers have signed a corresponding agreement.

**Kravchuk:** Of the three questions that were discussed, the decision was reached on this particular one.

**Yeltsin:** It must be said: Nuclear weapons and warheads will be dismantled and transferred to Russian territory with compensation for the uranium contained in these warheads: Russian uranium, though not enriched, will be supplied for atomic electric power plants—with a delay of one year.

**Question:** Will the tactical nuclear weapons withdrawn in June 1992 also be returned to Ukraine in this way?

**Yeltsin:** We did not discuss this.

**Kravchuk:** How can they be returned to Ukraine if they have already been dismantled?

**Yeltsin:** Completely destroyed....

**Question:** Leonid Makarovich, I am talking of compensation.

**Kravchuk:** You say compensation. Ministers have been authorized to study this question. We raised this question as a goal only, but have not signed any document.

I also want to add: In addition to warheads, we also have missiles, and we have fuel. We discussed this question with Boris Nikolayevich also earlier and there was a conversation with the U.S. president: We will ask and negotiate for assistance in dismantling and destroying not just warheads alone, because they are only a part of this great problem. However, we will negotiate this separately. For us, such a problem exists.

**'Text' of Russian-Ukrainian Communique**

LD0409072393 Moscow ITAR-TASS in English  
0712 GMT 4 Sep 93

[Text] Moscow September 4 TASS—The press service of the Russian president circulated on Saturday the text of the joint communique signed by Presidents Boris Yeltsin of Russia and Leonid Kravchuk of Ukraine in the Crimea on Friday.

During the working meeting between President Boris N. Yeltsin of the Russian Federation and President Leonid M. Kravchuk of Ukraine in the Crimea on September 3, 1993 an exchange of opinions on a wide range of issues of mutual interest took place. Among the issues discussed were further development of bilateral relations and, in particular, economic cooperation between the two countries, mutual payments, the Black Sea Fleet and strategic nuclear weapons.

The presidents stressed that Russian-Ukrainian relations are relations of special partnership for both states.

The presidents have instructed the state delegations to prepare within a month proposals for solving the problem of the Black Sea Fleet on a comprehensive basis, taking into account the ideas and agreements reached during the talks.

Also discussed was the question about the settlement of Ukraine's debt to Russia for 1992-1993.

The presidents confirmed their intention to continue efforts aimed at reducing and eliminating nuclear weapons which may become an important factor for building peace free of nuclear self-destruction. In this connection a set of questions was discussed, including on the utilisation of nuclear warheads deployed in Ukraine and fair compensation for them.

Participating in the summit meeting heads of government Viktor S. Chernomyrdin and Leonid M. Kuchma signed:

- an agreement between the government of the Russian Federation and the government of Ukraine on utilisation of nuclear warheads;
- basic principles of utilisation of nuclear warheads of strategic missile forces stationed in Ukraine;
- an agreement between the Russian Federation and Ukraine on the mechanism for exercising supervisory control over the exploitation of strategic nuclear complexes of strategic forces stationed on their territory.

The presidents expressed mutual will to promote further development and expansion of bilateral ties between Russia and Ukraine, especially in the economic sphere, on the basis of principles of equality, mutual benefit and honest fulfillment of obligations, and with due account of mutual interests and international law.

Boris N. Yeltsin and Leonid M. Kravchuk emphasised the usefulness of the summit meeting and expressed readiness to continue this practice.

The meeting was held in the atmosphere of mutual understanding and constructive dialogue.

President of Russia, Boris N. Yeltsin

President of Ukraine, Leonid M. Kravchuk

**Ukraine's Foreign Ministry Makes Statement**

WS0609162693 Kiev Ukravinske Radio First Program Network in Ukrainian 1400 GMT 6 Sep 93

[Text] During the last few days, Russian and other foreign mass media have been disseminating information that on 3 September 1993, during the Russian-Ukrainian summit, the Ukrainian part of the Black Sea Fleet and its onshore infrastructure was sold to the Russian Federation, and that final agreement on the removal of strategic nuclear weaponry from Ukrainian territory was reached. The Ukrainian Foreign Ministry has been authorized to announce that the information does not conform with the actual situation. It is intolerable that certain accords of protocol nature are described by mass media as statute agreements.

During the Crimean negotiations, the Russian side put forward a new proposal to purchase the Ukrainian portion of the Black Sea Fleet. As a result, government delegations of both countries received a protocol recommendation to examine the possibility of selling the Ukrainian part of the fleet to the Russian Federation and leasing some onshore facilities on Ukrainian territory. Delegations should prepare appropriate proposals, and after that, the issue will be evaluated from political, economic, and financial aspects. The issue of stationing the Black Sea Fleet will not be submitted to additional negotiations. Agreements on strategic nuclear weaponry located on Ukrainian territory include first principles of delivering nuclear charges and compensation for them. Agreement on such compensation was reached during the meeting of the prime ministers of the two countries. Press, television, and radio statements of some Russian officials have gone far beyond the real agreements that were reached on 3 September in Crimea. This has caused misunderstanding of the Ukrainian delegation's position during this meeting. Such statements distort the essence of the negotiations and do not contribute to the solution of the problems of relations between the two countries.

**Further Ukrainian Comments**

LD0609164293 Moscow ITAR-TASS World Service in Russian 1535 GMT 6 Sep 93

[By unidentified UKRINFORM correspondent for TASS]

[Text] Kiev, 6 Sep—"It is impermissible when certain understandings that have been reached and moreover that are at the protocol stage, are arbitrarily interpreted

and presented as final decisions with the help of the mass media," reads a statement by the Ukrainian Ministry of Foreign Affairs circulated today in connection with the coverage by several mass media of the Ukrainian-Russian summit in the Crimea.

"During the talks in the Crimea, Russia brought out a new proposal according to which it was ready to buy the Ukrainian part of the Black Sea Fleet. As a result of the meeting, the two presidents issued protocol instructions to the state delegations of Ukraine and the Russian Federation to examine within a month the issue of the comprehensive settlement of the problem of the Black Sea Fleet, whereby part of the Ukrainian fleet could be sold to the Russian Federation and part of the coastal infrastructure on the territory of Ukraine could be handed over for use on contractual terms. The delegations are due to submit the relevant proposals after which the issue will be examined as a whole, taking into consideration all political, economic, financial and other aspects," the statement notes. "A separate issue in this context is that of the Black Sea Fleet base, which should be examined bearing in mind international legal practice on the basis of appropriate contractual principles, and which is to be the subject of additional talks."

"The agreements on the strategic nuclear weapons located in the Ukraine contain basic principles of the recycling of nuclear weapons and compensation for them, while these [recycling and compensation] can only take place after the START-1 treaty has been ratified by the Ukrainian Supreme Soviet. Ukraine considers these agreements only in conjunction with the question of Russia paying compensation for the value of the tactical nuclear weapons withdrawn from its territory. An accord on such compensation being granted to Ukraine was reached at the talks of the two states' prime ministers."

It is being pointed out that arbitrary interpretations of officials' statements by the press distort both the content of the talks which have just been held, and the spirit and letter of the accord reached in the Crimea, and do not contribute to resolving the complex problems which the two countries are facing in their relations.

#### Russian Press Commentary

*MK 1009095893 Moscow NEZAVISIMAYA GAZETA*  
in Russian 10 Sep 93 p 1

[Vera Kuznetsova report under "Details" rubric: "Ukraine Can Become a Nuclear State After Yeltsin's Departure"]

[Text] In the kitchen where Ukraine and Russia are dividing the nuclear weapons of the former USSR, the hot air is not getting any cooler. It seems that the Massandra agreements on guaranteed and author [avtorskiy] supervision of the exploitation of strategic missile complexes, utilizing nuclear charges, and the basic principles of disposing nuclear warheads signed by the Ukrainian and Russian premiers on 3 September have

resolved the problem. At last, Ukraine, transferring the nuclear weapons to Russia, will become a nuclear-free power.

All is well in these agreements.... Russia will take the nuclear warheads out, dismantle, and dispose of them. Ukraine guarantees transit safety across its territory. The sides undertake to ensure uninhibited import and export of equipment for technical purposes (including maintaining the missile complexes in working condition). As for the products received from the utilization, the agreement provides for a commercial transaction (settlements are effected based on world prices). The details have also been taken care of: Weapons grade plutonium will, again by mutual agreement, stay in the Russian Federation until the question of its disposal is resolved (so far there is no technology for industrial reprocessing of plutonium; Americans have made some proposals, but these are merely experimental technologies). In addition, Russia undertakes to pay to Ukraine its share, minus the expenses involved in the utilization, either with uranium or, if Ukraine accedes to the International Atomic Energy Commission, with nuclear fuel for nuclear power stations. All is good with the exception of one unimportant, not to say primary, detail. The Massandra agreements do not provide for any time frame: When will the above-mentioned good intentions finally be translated into life?

In the course of preliminary talks with the Ukrainian delegation, a term of two years was mentioned. Boris Yeltsin directly supported this in Massandra, noting, among other things, that he has a little more than 2 years to go as president and that the problem must be resolved within this time. Russian Federation Defense Minister Pavel Grachev also proposed that the signing of the agreements be speeded up, not only on the strategic missile forces but also those concerning the air force. This, in his opinion, will open the way for Ukraine's ratification of the START-1 Treaty. The Ukrainian delegation, however, refused to bind itself with any concrete obligations. Now the heads of government will set the time frame. Russian experts believe that Ukraine stands to gain from dragging these "specifying procedures" to infinity. Or until the moment when the political situation in Russia suddenly changes and there will be still fewer obligations to that country.

True, today some world powers do not care for any tricks with nuclear weapons. And none of them is going to finance Ukraine's nuclear ambitions. The latter will need 1.089 billion rubles in 1993 alone to maintain guaranteed supervision of its strategic missile forces. Furthermore, until the agreement on the disposal of nuclear warheads comes into force, a critical situation is developing at bases where nuclear explosives are stored. At present approximately 70 to 80 megatons are stored at the base in Pervomaysk, and in Khmelnitskiy—20 to 25 megatons. These nuclear substances are to be taken to Russia as a first priority because otherwise, should a defect occur in the yet undismantled nuclear weapons, Ukraine will simply have no place for them.

All these figures so far remain behind the scenes of the top level political dispute between Ukraine and Russia. The questions about the missile complexes, the strategic bombers, and nuclear warheads for cruise missiles located in Ukraine still remain outside the signed agreements. Ukrainian Defense Minister Yury Morozov flatly refused even to discuss these problems with the Russian delegation in Massandra, saying that the sold fleet is enough—there will be no missiles. Kravchuk, however, somewhat moderated the Ukrainian military leader's sharp position at the talks in Massandra. In particular, the president—having received prior to the Massandra talks a protest from the Russian delegation proposing to lift the ban on the Black Sea Fleet commander's participation in the meeting—said many unpleasant words to his minister. Some experts at the negotiations believe that perhaps, if the Ukrainian side had shown greater flexibility from the outset, the results of the Massandra meeting would not have been so drastic. According to eyewitness reports, on entering the hall after face to face talks with Kravchuk, Boris Yeltsin was not at all in a bloodthirsty frame of mind. He first asked: "Have you made any progress on the fleet issue?" Upon receiving a negative answer he added: "Then put your debts on the table."

### Grachev, Aspin Sign Memorandum

LD0909195993 Moscow ITAR-TASS World Service  
in Russian 1617 GMT 9 Sep 93

[By ITAR-TASS correspondent Aleksandr Korolev]

[Text] Washington, 9 Sep—I anticipate that this visit will enable our military departments to work more closely together, not only at the level of defense ministers or the general staff, but at all other levels too, stated Russian Defense Minister General Pavel Grachev, who is here on an official visit, in an interview for ITAR-TASS and "Ostankino" television correspondents. During this visit the head of the Russian military department and his American colleague Les Aspin signed a memorandum on mutual understanding.

As the minister noted, the meetings being held in Washington are aimed at getting to know each other better and at establishing closer cooperation. In many ways conducive to this is the signed document that specifically sets out the spheres of bilateral partnership, starting with troop units and educational establishments, and concluding with such spheres as culture, sports, and science. The memorandum provides for a more intensive exchange of military servicemen, who will be trained both in the United States and in Russia, and the more frequent staging of joint exercises. It also embraces such spheres as safety at sea and the passing of information of interest to both sides. This means, in the final analysis, the direct "hot line" that has been so vital in quickly providing replies to questions that arise from one side or the other. We are building up our exchanges every year and at the end of the day we are learning from one another.

Dwelling on plans to set up Russian-American peace-keeping forces, Grachev said that an announcement had only just been made and it was too early to say where these forces might be deployed. Recalling that they would be built on the basis of the 3rd U.S. Infantry Division and the 27th Russian Motor Rifle Division, he stressed that their task at the moment was to draw up a plan of joint training and technical fitting, and to reach an agreement on holding joint command and troop exercises. Meanwhile, he said, the political leaders of the two states will be able to determine those areas where these forces may be used. The minister himself did not rule out the possibility of the peace-keeping forces being deployed on the territory of Russia or the former USSR. [Moscow ITAR-TASS in English at 1824 GMT on 9 September, in a similar report says: "Grachev ruled out the possibility of deploying peace-keeping forces in Russia or other former Soviet republics."]

For his part, Aspin, in an interview for ITAR-TASS, said that questions on nuclear armaments in the former Soviet republics were touched upon at the talks. In this connection he gave a positive appraisal of the recent agreement reached between Russia and Ukraine. As the head of the Pentagon stressed, this accord gives us much inspiration and I would very much like to congratulate the Russian Federation and the government of Ukraine. In our opinion, the idea of such a settlement to the nuclear armaments problem is a very good one, and we hope that it will be carried out in practice, Aspin noted.

## RUSSIA

### U.S. Funding for Russian Disarmament Programs

#### Elimination of Offensive Strategic Missiles

LD3008174293 Moscow Russian Television Network  
in Russian 1445 GMT 30 Aug 93

[From the "Parliamentary Hour" program]

[Text] Yuriy (Glybin), the first deputy chairman of the Russian Federation Committee for Defense Industries, and plenipotentiary spokesman of the U.S. Defense Department (Gloria Dassey) have signed an agreement in Moscow on cooperation in the elimination of strategic offensive weapons. Due for elimination, as you know, are intercontinental ballistic missiles, silo launchers, submarines' ballistic missiles and their launchers, and also heavy bombers. Specifically within the framework of the agreement, the U.S. side will supply Russia with equipment to the value of 130 million dollars.

### \$85 Million for Nuclear Disarmament, Materials Control

LD0309205693 Moscow ITAR-TASS in English  
1930 GMT 3 Sep 93

[By ITAR-TASS correspondent Arkadiy Sidoruk]

[Text] Washington September 3 TASS—Russian Minister for Nuclear Power Engineering Viktor Mikhaylov

and U.S. Deputy Defence Minister for Political Issues Frank Wisner signed an agreement on Thursday on U.S. granting Russia 85 million dollars in aid for carrying out nuclear disarmament and exercising control over nuclear materials used for peaceful purposes.

The funds will be provided within the framework of the Nunn-Lugar draft bill from allocations of the American military department totally worth 800 million dollars and intended for providing aid to newly independent states of the former Soviet Union in the elimination of thousands of nuclear warheads and the storage of nuclear materials.

The Pentagon's statement circulated in the American capital, says that these agreements are a considerable step forward in Russo-American cooperation aimed at the elimination of nuclear weapons in the former Soviet Union posing no danger to the environment and prevention of the proliferation of weapons of mass destruction.

One of the signed documents envisages granting 75 million dollars for the purchase of equipment and training technical personnel of a facility expected to be established in Russia for the storage of nuclear fuel obtained from dismantled weapons.

Another agreement provides for the allocation of 10 million dollars in technical aid to Russia to modernize the system of control, estimation and storage of nuclear materials used for peaceful purposes.

### Radio Report Claims \$130 Million Toward Arms Elimination

LD0509154193 Moscow Radio Rossi Network  
in Russian 0315 GMT 5 Sep 93

[Text] The Russian Federation Committee for Defense Industries has announced the conclusion of a Russian-American agreement. The agreement provides for free supplies of equipment by the United States in order to ensure a prompt, safe, and ecologically reliable elimination of arms under the corresponding 1991 treaty on the reduction of strategic and offensive armaments. The total value of the equipment being provided amounts to \$130 million. The first batches are to arrive in 6 months' time.

### General Report

PM0809131793 Moscow KRASNAYA ZVEZDA  
in Russian 7 Sep 93 p 3

[Mikhail Pogorelyy report: "The United States Helps Russia To Disarm"]

[Text] Agreements have been signed in Washington on allocating Russia resources to be used for the needs of nuclear disarmament. As is well known, the Nunn-Lugar amendment provides for the allocation of \$800 million to dismantle, transport, and destroy components of the nuclear arms of the former USSR, and also to ensure the safe storage of fissionable materials. The current

package, worth a total of \$85 million, contains funds for the implementation of two projects.

The first of these, the Pentagon statement on this subject notes, envisages ensuring the purchase of special equipment and the training of personnel for the storage center for fissionable materials recovered from warheads that is being set up on Russian territory. In the long term, after appropriate treatment, these materials could be offered on the world market as fuel for nuclear electric power stations. The second project is connected with funding the development of a reliable storage and inventory system for radioactive materials.

The agreements were signed before the accords between the Russian and Ukrainian presidents on the nuclear disarmament of Ukraine were reached. Obviously, the large-scale measures connected with the dismantlement of the Ukrainian arsenal will require, in addition to certain compensation payments promised to Kiev by the U.S. side, sizable expenditure on Russia's part also. So that U.S. congressmen will soon undoubtedly have to return once more to the Nunn-Lugar amendment. Incidentally, experience shows that they are far more willing to allocate funds for disarmament, especially nuclear disarmament, than for increasing the potential of weapons of mass destruction.

### Ukrainian Policy on Nuclear Arms Pondered

93WC0113A Moscow NOVOYE VREMENYA in Russian  
No 34, Aug 93 [signed to press 17 Aug 93] pp 10-12

[Article by Arkadiy Moshes: "Into the Nuclear Powers Club—Uninvited"]

[Text] Almost 15 months have elapsed since the time of the signing of the Lisbon Protocol to the START I Treaty, according to which Ukraine, together with Belarus and Kazakhstan, undertook to rid itself of nuclear weapons and subscribe to the Nuclear Nonproliferation Treaty (NNT) as a nuclear-free state. But no real steps proving Ukraine's aspiration to keep its promises are being taken, as before. On the contrary, the waves of Ukraine's nuclear ambitions are beating increasingly powerfully against the yielding doors of the nuclear club, threatening to destroy the barriers created by the practice of nonproliferation—one of the few stabilizing elements of the world order.

Ukraine's position is being determined increasingly by a desire to obtain security guarantees and many billions of dollars in compensation for the dismantling and the contents of the warheads in exchange for nuclear-free status, although the declarations of the Ukrainian leadership are becoming increasingly vague. The constant postponement of the time of ratification of the Lisbon Protocol is suggesting the thought that the strategic purpose of Ukraine's ruling circles is to stretch things out until 1995, when there is to be a conference to review and extend the NNT. The existence of a nuclear Ukraine

in 1995 would signify the virtual failure of the NNT regime, and affiliation would be simply pointless for Ukraine.

#### Order Countermands Order

Addressing the World Economic Forum in Davos at the start of February of this year, Ukrainian President Leonid Kravchuk took the first step in preparation of public opinion for the conversion of this country into a nuclear power, declaring that the nuclear weapons deployed on the territory of Ukraine "belong to no other state."

These words encouraged Ukraine's members of parliament to take further action, the bulk of whom are disposed in favor of the country's nuclear status as it is. At the end of April the deputies turned down the draft military doctrine, which had initially spoken of a **commitment** to adhere to the three nonnuclear principles and, subsequently, only of the **intention** to become a nuclear-free state.

A statement demanding that the Supreme Council confirm the fact that Ukraine is both *de jure* and *de facto* a nuclear power, which was signed by 162 deputies (far more than the numbers of the People's Council opposition bloc), was distributed in parallel with this.

The parliamentary hearings devoted not to the ratification, as might have been expected, but merely to the start of official consideration of the START I and NNT treaties, which were held in June, confirmed once again that the members of parliament were not ready to finally take the decisive step along the path of disarmament.

The activity of the members of parliament reached its culminating point on 2 July, when a clause proclaiming Ukraine the possessor of nuclear weapons was inserted in the "Basic Directions of Ukraine's Foreign Policy," which was adopted by 226 votes to 15. The Supreme Council of Ukraine Commission for International Affairs—the sponsor of the said clause's insertion, incidentally—thus deemed ratification of the Lisbon Protocol unadvisable.

Practical measures were soon to follow. The next day even, 3 July, Order No. 50 of Ukrainian Defense Minister Konstantin Morozov "On the Status of 'S' Facilities Deployed in Ukraine" (nuclear engineering facilities), which countermands the order of Russian Defense Minister Pavel Grachev on the inactivating of these facilities and which reduces to nothing a real step in Ukraine's nuclear disarmament, was issued. According to the minister's order, "S" facilities will be transferred to Ukraine's 43d Missile Army. This means that 60 warheads, which are being removed from the SS-19 missiles being withdrawn from Ukraine, will shortly be fully under the control of Ukraine.

The position of the government as a whole is not as radical, it is true: a commitment to nuclear-free status in the future with temporary continuation of ownership of

the nuclear weapons. But this is evolving in the same direction. On the one hand the government sees objective technological, economic and, primarily, financial problems of conversion into a nuclear state (this would require \$25-40 billion) and is for this reason prepared to shift onto Russia the burden of the disassembly of the dangerous old SS-19 missiles which has begun. But, on the other hand, a "narcotic addiction" to nuclear prestige is already being manifested in the behavior of the Ukrainian Government. The candor of K. Morozov, who, according to the British journal *THE ECONOMIST*, told his NATO colleagues on 30 March that "the West will listen to what Ukraine has to say only as long as there are nuclear weapons on its soil," was no accident.

The change in terminology is indicative: Whereas previously the Government of Ukraine was talking about the achievement of nuclear-free status, there is now increasing talk about nuclear disarmament—a multilateral process, in which all the nuclear powers should participate. The reasoning in support of the nuclear option is expanding—from justification of Ukraine's right to weapons by the provisions of conventions on the division of the property of the disintegrated states to references (correct—A.M.) to society's pronuclear sympathies.

Nonetheless, to judge by a number of statements of the Ukrainian Foreign Ministry, which is manifestly endeavoring to smooth over the negative impression made by parliament's decisions, the leadership of Ukraine is not prepared as yet to openly abandon the commitments. But since the genie of pronuclear sympathies has been let out of the bottle, the government has been forced to occupy increasingly radical positions.

A letter sent by President Kravchuk to the leaders of the Seven in Tokyo, the peremptory form of which may be considered evidence of nuclear blackmail, is indicative in this context. This letter says that ratification of the SALT I and NNT treaties would be accelerated were the developed countries to assist Ukraine on a more substantial scale in its spending connected with nuclear weapons.

The Ukrainian Government has achieved much in securing the interests of the state: By its firm, uncompromising position it has already, without having done anything to achieve nuclear-free status, gotten the United States, Britain, France, and Russia to grant it texts of the declaration "Guaranteeing the Security of Ukraine," and China has consented to grant such a declaration. Continuation of this position could appear to the Ukrainian leaders entirely justified, therefore.

#### Most Important of All

But Ukraine's international self-assertion could with equal right be called a failure of the policy of the countries and forces which have attempted to convert

Ukraine into a nuclear-free power. In short, the reasons for Kiev's intractable position should be sought not only in Ukraine.

It would seem that a reason for the firmness of Ukrainian politicians is the ambivalent, if not to say favorable, position of the West, primarily the United States. While remaining uneasy in connection with the nuclear weapons deployed in Ukraine, the United States has essentially abandoned any real pressure.

A pivotal moment was the publication on 30 April in the newspaper GOLOS UKRAINY of an article by U.S. Ambassador Roman Popadiuk entitled "You Do Not Realize How Important You Are." The article maintained that Ukraine is of paramount interest for the West not only as a market for investments which would be followed by political support but also as a generator of political stability and an economic force of the region and also as a factor preventing a revival of Russian imperialism creating guarantees of regional security and prompting political reform in Russia itself.

That these were not empty words was confirmed by the perfectly friendly visits to Kiev of Ambassador at Large Strobe Talbott and Defense Secretary Les Aspin and also by K. Morozov's talks in Washington, which were held after the events of 2-3 July and which were extraordinarily successful for Ukraine.

FRG Chancellor H. Kohl called Ukraine a stabilizing factor in Europe. Quite a friendly position is occupied by France, which is connected for it with the need for a certain revision of its own nuclear policy. All these factors are, naturally, having an encouraging effect on the forces in Ukraine which are endeavoring to gain access to nuclear weapons and increasing their chances.

It is essentially not very important which specific reasons prompted the Western countries to occupy such a position. It is hardly likely that the United States, having forgotten that the SS-19 and SS-24 missiles were intended to hit targets on American territory, is reorienting its policy toward rapprochement with Ukraine in order to use it as a trump card in relations with Russia. But facts are facts.

It would seem, on the whole, that the failures of the world community in the business of the "denuclearization" of Ukraine are explained by three interlinked factors. First, the incapacity of the United States to formulate a precise political course on the given question, which was connected initially with the 6-month election contest and then with the timeout taken by the new U.S. Administration to work itself in. As a result it transpired that Washington was unable or had no desire to go further than diplomatic demarches and exert real pressure.

Second, by the fact that the United States has proven incapable of establishing efficient political interaction with Russia, which is undoubtedly more preoccupied

with Ukraine's drift toward nuclear status. An underestimation of the importance of Ukraine's position (particularly in the period of preparation of the START II Treaty) and of Kiev's possibilities of resisting demonstrative pressure evidently played their part.

Third, by the fact that Russia has proven not all that capable of conveying its viewpoint both to the West and to Ukraine. The April statement of the Government of the Russian Federation, which expressed concern at Ukraine's position and proposed practical measures to resolve the problem, just like the February warnings of the hazardous condition of the missiles deployed in Ukraine also, went practically unnoticed in the West. Nor has there been an adequate response of the West to the statement of the Russian Government of 4 August, which was another "decisive warning" and which did not earn a serious response from Kiev either even, what is more.

On the other hand, the developed habit of appealing on all matters to the West as an arbiter has negative consequences also. It was for this reason, evidently, that nuclear problems were not properly discussed at the meeting of Presidents Yeltsin and Kravchuk of 17 June of this year. Only one person, incidentally, responded promptly to Order No. 50—Pavel Grachev—so it is hard to talk as yet even about the **swift** formulation of a position within the Russian leadership.

#### Complication of the System

As of today the tops of the nuclear triangle appear as follows. Ukraine has strengthened its positions, approaching internal consensus in its strategic aspiration to nuclear weapons and not yielding to Russian and American pressure.

As a way of getting things moving, the United States is proposing storage of the dismantled warheads on the territory of Ukraine under international supervision. This proposal totally fails to take account of the position of Russia inasmuch as it does not decide the question of ownership and would reveal some still important secrets to foreign observers. American generals would hardly like the permanent presence of Russian military personnel at their nuclear munitions dumps, we imagine.

The Russian approach, which consists of the need to secure for Russia the right of ownership of such weapons deployed in Ukraine, is fully justified, but is simply not being realized as yet. Given any outcome, Russia cannot ignore nuclear weapons on its borders and the conversion of the algorithm of deterrence from the transatlantic to a "good-neighbor" dimension. Russia's approaches are evidently in need of adjustment.

The following measures, it would seem, would be useful for finding a compromise version which takes account of the interests of all parties.

First, a toughening of Russia's position on this matter—in both the Western direction and in bilateral relations.

It is highly likely that the West will not act adequately in the sphere of security on the territory of the former USSR. It is time, therefore, for Russia to use the few remaining opportunities for pressure on Ukraine to strengthen its own and European security. A stimulation of interaction with the European powers, not to the detriment of contacts with the United States, inasmuch as the Europeans could for various reasons prove more interested in preventing the conversion of Ukraine into a nuclear state, would seem useful.

It would be expedient, possibly, to sign a Russian-Ukrainian agreement requiring Russia to maintain the Ukrainian missiles, in which Ukraine has a considerable interest. But the conditions on which Russia would sign such an agreement should be carefully worked out in Moscow. Thought should be given also, as one version, to the recording of a provision on temporary joint ownership with Russia's legal responsibility for the nuclear weapons, which would not resolve the problem (the Black Sea Fleet is an example of this) but would afford Russia legal access to the missiles and get the question of ownership moving.

Second, a permanent negotiating process on problems of Ukraine's nuclear disarmament with the participation of Russia, Ukraine, and the United States (or the entire nuclear club) should be commenced. This would limit Ukraine's freedom of political maneuver—inasmuch as the practice of bilateral meetings and visits which exists currently is enabling Kiev to get away with polite words and to avoid translating the problem to a practical plane—and at the same time facilitate a solution of the question of Ukraine's security guarantees.

On the other hand, internationalization would afford Russia an opportunity to avoid charges of a revival of imperialism. At the same time Russia's position at the negotiations should not amount to a desire to achieve compromise at any price. The negotiating forum should, at least, contribute to the formulation and solution of three questions—ownership of the nuclear weapons, the status of the Russian forces servicing them, and compensation to Russia for the disassembly and destruction of the missiles and other nuclear munitions (the ultimate goal—Ukraine's "denuclearization"—should not be discussed: The commitments and the timeframe of their fulfillment are contained in the Lisbon Protocol).

The first question may not necessarily be decided in Russia's favor, but its position should be clear: In the event of recognition of Ukraine's right of ownership, Russia reserves the right to end the servicing of the arms, and the entire responsibility would rest with Ukraine. The status of Russia's forces should be specified in most detailed fashion—all too many people in Ukraine are starting to talk about the occupation nature of their presence.

A third question also should be put on the agenda. It is not entirely clear why the missiles are being serviced by

Russian units and their presence and possible disassembly and withdrawal are being financed by the Russian taxpayer, and the compensation will be received by Ukraine alone.

We should not be afraid of posing sharply worded questions. The West will in the foreseeable future retain an interest in a solution of the Ukrainian nuclear problem inasmuch as it needs a continuation of the process of disarmament and ratification of the START II Treaty in Russia, inasmuch as a failure of the NNT practices and the appearance of new nuclear states are inadmissible for the West, and inasmuch as the danger of incidents and unsanctioned launches would increase in the event of Ukraine's becoming a nuclear power.

If, however, Ukraine refuses to participate in negotiations or shows a lack of constructiveness in its position, all the "i's" will have been dotted.

#### **General Claims Russia Not in Control of Ukraine's Nuclear Weapons**

*LD1509180293 Moscow Russian Television Network in Russian 1445 GMT 15 Sep 93*

[From the "Parliamentary Hour" program]

[Text] Colonel-General Yevgeniy Maslin, head of the Russian Defense Ministry's Chief Directorate for Nuclear Munitions, said that Russia has de facto lost control over the use of nuclear weapons deployed on the territory of Ukraine.

Thus, for instance, the crews flying the strategic nuclear bombers and subunits serving the nuclear munitions have been incorporated within the Ukrainian Armed Forces for the past 18 months. At the same time, Moscow still retains, for the time being, the potential of operational control of the strategic missile troops.

In the meantime, the temperature suddenly went up in a nuclear munitions storage facility in Nikolayev Oblast. Ukraine Prime Minister Leonid Kuchma told the Russian leadership. A group of specialists from Russia urgently departed by air to check out what had taken place.

#### **Official Contemplates Uranium Processing Deal With U.S.**

*LD1609155493 Moscow ITAR-TASS in English 1400 GMT 16 Sep 93*

[By ITAR-TASS correspondent Veronika Romanen-kova]

[Text] Moscow September 16 TASS—Russia and the United States may sign in October a deal on joint processing of weapons-grade uranium which was not concluded during Russian Prime Minister Viktor Chernomyrdin's recent visit to the United States.

In an interview with ITAR-TASS, Viktor Mikhailov, Russian minister of nuclear power engineering, explained his optimism by the fact that the agreement is very beneficial to both countries from the economic and political standpoint.

"At present, the world market is oversaturated with uranium. However, Russia's share on this market is only 5-6 percent, while the U.S. accounts for 50 percent of the total. At the same time, many experts believe that uranium technologies in Russia are much better and that American plants need modernisation," Mikhailov said.

A joint Russian-U.S. commission has worked out a draft contract under which Russia will process uranium to be extracted from scrapped weapons and resell it to U.S. nuclear power plants. The 20-year contract envisages processing 500 tonnes of uranium (less than 50 percent of the total amount to be recovered from scrapped missiles). The deal is estimated at 11.9 billion U.S. dollars, about 600 million dollars a year on the average.

Mikhailov regretted that at the last minute the United States put forth a political condition, demanding guarantees of proportional distribution of profits between Russia, Kazakhstan and Belarus. He said the agreement will not be signed until this demand is withdrawn.

#### **Scientists, Legislators on Fate of Arzamas-16** 93WC0110A DELOVOY MIR in Russian 27 Aug 93 p 13

[Report on a round-table discussion by Vladimir Gubarev and Igor Mosin: "The Nuclear Bomb and Conversion: Dialogue of the Builders of Atomic Weapons and a Representative of Legislative Authority"]

**[Text] A meeting between managers of the Federal Nuclear Center from Arzamas-16 and representatives of the Supreme Soviet of the Russian Federation was held in Moscow at the initiative of the "Nekos" studio of science journalists. The objective was simple: there was a desire for legislators and scientists to exchange opinions on very important questions that concern the society today: What should be done with nuclear weapons, what should be done with the scientific and intellectual potential of the closed cities, is it possible to have conversion at a nuclear complex, and how can it be carried out? It is impossible to cover the infinite and we are offering only part of the discussion for the attention of the readers: the thoughts of the participants of the "round table" on the conversion problems of the creators of nuclear weapons.**

#### **Radiy Ilkayev, first deputy scientific manager of the Federal Nuclear Center:**

The situation here for us at Arzamas-16 has become alarming and insulting. Imagine a scientist doing research aimed at protecting the defense of the country. The most complex experiments, highest qualifications, and, finally, great danger in the work. Since the state

values his labor very highly, everything is guarded very closely. And here is the paradox of our time: a scientist receives a salary that is only a fraction of that of the person guarding him.

Secondly, our center was established from the very beginning as an absolutely unique scientific organization. This task was carried out in full. Practically all well-known scientists connected in some way with nuclear physics worked here. They set up unique science schools for physicists, mathematicians, chemists, and electronics specialists. Work in such a serious field as nuclear weapons is impossible without a powerful fundamental base. This is axiomatic in the development of science.

Our immediate leaders understood the importance of basic research and made sure that they were always up to date. We have things to be proud of. The largest nuclear reactors in the world are operating at Arzamas-16 and the largest laser facility in Europe has been built there. In my opinion, everyone who comes to visit us and gets to know our base always experiences a sense of esteem for having had contact with substantial science.

Unfortunately, these times are seriously undermining our basic science. It requires considerable funding, which is quite natural. But this funding is not being allocated. I will repeat once again: our specific circumstances are such that without basic research it is impossible to work on the safety of nuclear weapons, their improvement, or even their disposal. Just as there cannot be a house without a foundation, our work is also senseless without continuous research.

The problem is exacerbated by the fact that our primary customer can be none other than the state. It cannot be an enterprise, a kolkhoz, or even the largest firm. For we deal with specific and very large programs. The center can be utilized only to solve such major tasks. It is also possible to deal with minor conversion problems but then our potential will quickly be dispersed and no real effect can be expected. The idea is to utilize our intellectual possibilities, scientific developments, and technological potential in accordance with the existing traditions, management structures, and technological base. And the Federal Nuclear Center was established for the resolution of major programs that are very science-intensive, labor-intensive, and complex. So let it be utilized as intended. In any case there are no analogous forces in Russia that are capable of doing what we can do.

There are also specific proposals. The energy problem will be very acute for Russia in the immediate future. We together with leading domestic institutes are proposing the formation of a national program to organize the power engineering of the future, a program that is aimed at the development of the safest technologies. We have very interesting developments and this is precisely the

task that corresponds to our potential and our possibilities. And can it really be that Russia does not need safe energetics?

We have major programs at the national level to raise the safety level of nuclear stations. This is a most urgent problem for the entire world.

Of course we have nothing against specific conversion steps. We have many technologies that can serve as the basis for the production of quite definite kinds of equipment: in medicine, industry, and agriculture. And we are already making such instruments and concluding contracts.

My personnel opinion is that 15 percent of the capacity of the institute can work on conversion, 50 percent must satisfy military needs, and 40 percent work on basic research. But all of this can be settled depending on the specific tasks and requirements.

There is one fundamental requirement that everyone must understand. Conversion, basic science, and work in the military field all require a state approach and serious state support. But we are not yet seeing this.

**Valeriy Skripchenko, deputy chairman of the Commission of the Supreme Soviet of the Russian Federation on Budget, Plans, Taxes, and Prices:**

I myself am a physicist by training and everything that is being said here is near to my heart. It is not quite so that our science needs state support. First they rob science and then they decide whom to support and whom not to support. I think that the collapse of the military-industrial complex is a crime against the society. Historically it happened that the best that the state had went into the military-industrial complex. Throughout the world the efficiency of the military-industrial complex is second only to trafficking in narcotics. Dealing in arms is the most advantageous source of income. But we, having the most advanced technology for the manufacture of weapons and their most advanced kinds and capabilities, fell into complete ruin. That is incomprehensible.

The Americans are calling for us to disarm but they themselves are actively pushing us out of our traditional arms markets and thereby earning tens of billions of dollars. We are hanging on their every word. The task of the state is to stop the robbery and disintegration of the military-industrial complex, for it is capable of supporting itself and feeding us all.

Here is a specific example. When we found ourselves in a state of conflict, we provided only 5 percent of the nuclear fuel in the world market. We have now actively begun to disarm and it is reasonable that our share of the fuel trade in the world market should increase. That is not what happened here. The Americans do not want to concede a single percent to us. But today we are capable of satisfying 20-25 percent of the market needs for nuclear fuel. This is on the order of \$5 billion. This sum

is enough to support not only all of our nuclear scientists but also all of Russian science for 5 years in advance.

But they are not allowing us to earn through honest labor, as they say. And at the same time, on every corner they are crying that we must not sell weapons to Husayn or Libya. Excuse me, but where are we supposed to go? We always sold our Migs to the Finns and now the Americans are squeezing us out of there. They lose money on these aircraft but they are doing that to knock us out of the market and to put themselves in a stronger position. They may lose money today but tomorrow it will be profitable. Bush purposefully involved himself in this matter so that they would buy from them rather than from us. And what is our own state doing? It is suffocating and destroying the military-industrial complex with taxes.

The Ministry of Atomic Energy of Russia is now earning somewhere around a billion dollars. A firm decision must be made to invest this money for its internal needs: conversion programs and support for the intellectual potential. This measure alone will resolve many problems within the branch. And there is no need to go around with an outstretched hand asking for subsidies.

And one last thing. Today the nuclear complex has unique energy reserves—uranium and plutonium. This comprises the main wealth of the country. There are now a lot of people who want to sell all this for nothing. By deepest conviction is that those who created this wealth must handle it intelligently. They are capable of utilizing it in peaceful programs. It is now important to protect the nuclear physicists from dilettantes in politics, science, and the professional sphere. And the main problem today is not poverty but the level of robbery.

**Vladimir Belugin, director of the Federal Nuclear Center Arzamas-16:**

Our scientific potential is comprised of 6 members of the Academy of Sciences, more than 60 doctors of science, about 700 candidate doctors of science, 2,500 scientific associates, and about 10,000 engineers and specialists. And there are just about as many workers. But one description fits all of these people—professional of the highest qualifications. Our science center is one of the very largest in the world.

As of today the main problem is the lack of definiteness. Nothing is definite—whether we are needed or not, the legal and economic aspects of our existence, and our relations with the state. We have long-term programs for work in the area of weapons. The priority direction here is safety of weapons.

As of today we have 18 conversion programs having to do with energetics, machine building, medicine, and ecology. These programs have gone through numerous investigations. But there is no technology for their review and the making of decisions on them. The situation is this: we are prepared to work on conversion but the conditions do not exist for this at all.

It may be that we are getting a little ahead of events. First of all a doctrine for the country's overall security must be formulated. It must specify the place and role of nuclear weapons. Then one can also think about the direction of the development of conversion programs and what part of the potential should be applied in them. Such a doctrine does not yet exist.

There is still one other question. The Federal Nuclear Center is guided in its work by the decisions of state agencies. At one of the congresses of people's deputies, a fundamental decision was made to the effect that our defense capability must be strong. That means that we must carry out this decision. On the other hand, it somehow sounds incomprehensible that the nuclear centers generally must be mothballed. We are not against this. But this matter must be resolved legislatively: a certain number of enterprises, within a certain time, and for a particular output. Everything must be definite. Otherwise subsequent deputies will come and ask: Excuse us, esteemed fellows, but on what basis are you making saucepans instead of bombs and who permitted you to destroy the nuclear complex? You are offenders against the state. And they will be right. What will we be able to say to them? This is why we are demanding the immediate elaboration of an overall military doctrine.

**Valeriy Skripchenko:**

I will add: what you said hypothetically has already happened with one of the defense plants. This enterprise produced weapons for close combat. There was not a single order in 1991 and none in 1992. The director threw out the old equipment, set up new machinery, and began to produce civilian output. As it usually happens, he immediately receives an order for weapons. He says: excuse me, but I am already making samovars. They began to look into the matter and brought criminal charges for converting defense into civilian capacities. And naturally no one thought about calling to account those who put him in a hopeless situation 2 years ago.

So you are right: the question of conversion is directly linked with the national security of Russia. Right-thinking people understand that without nuclear weapons Russia will not maintain its influence and political positions. For this reason, the work of the defense complex must not be determined by or subject to a momentary political situation, even if it is that of very high-placed leaders, but it must pursue the course of a well-conceived, purposeful, and preferably long-term state policy.

**Radiy Ilkayev:**

There is still another fundamental question. Our entire past history shows that Russia can exist only as a strong state with respect to defense. It is impossible for the state to exist across such a gigantic expanse—from the Baltic Sea to the Pacific Ocean—without the national idea of strong defense.

The realities of today's world are such that there can be no talk of strong defense without nuclear weapons. And there is no alternative to this at the current level of development of the society. There is one other thing that I would like to add. If we destroy our nuclear complex, this will be a colossal mistake. Everything has already been set up here and the work is proceeding. But to create all of this required decades of most intense labor. I fear that if we allow it to deteriorate we will no longer be able to restore it. And its elimination, in turn, will require gigantic expenditures that are also beyond our means.

**Valeriy Skripchenko:**

Here is a specific proposal. When money went to the budget, it was hard to divide it up between a hospital and a nuclear center. But the money and the budget come from the Ministry of Atomic Energy. It is much simpler for the ministry to make a decision that a customs duty in the amount of 50 percent on the sale of the output of the structures of the Ministry of Atomic Energy has a wholesome effect on the support and execution of developed conversion programs.

**From the editor's office.**

The "round table" showed that there is absolutely no contradiction between the creators of nuclear weapons and representatives of legislative authority. And although in our conversation we gave the word to one people's deputy—V. Skripchenko (he simply thought more than others precisely about the problems of conversion)—other representatives of the Supreme Soviet who participated in the dialogue also fully share the opinion of the scientists.

In the first place: Russia needs an overall political doctrine for the state's defense capability.

Secondly: it must define the role and place of the nuclear complex.

Thirdly: nuclear weapons are a matter for the state and all the problems having to do with their creation, improvement, and disposal plus questions of conversion must be fully in the competence of the state.

Well, we will consider that a fundamental program of action has been worked out for the preservation of the country's nuclear potential and for its conversion. With the help of the "Nekos" studio of science journalists, DELOVOY MIR will seek its steady realization. Russia must be strong.

**More MiG-21s Destroyed at Taganrog Air Base**

*PM0309123193 Moscow KRASNAYA ZVEZDA  
in Russian 1 Sep 93 p 1*

[Report by Aleksandr Maksimchuk of the North Caucasus Military District Press Center under the "From Our News Bureau" rubric: "Final Landing for MiGs"]

[Text] One hundred and twenty four MiG-21 aircraft made their final landing at Taganrog Airfield. Here, at a base for destroying aviation hardware, the once-menacing combat machines were soon dismantled and turned into heaps of scrap metal.

The destruction of the aircraft is being carried out within the framework of the Treaty on Conventional Forces in Europe, signed 19 November 1990 by 22 member countries of NATO and the former Warsaw Pact. The operation to destroy combat aviation hardware is being monitored by foreign military inspectors.

**Ukrainian Missile Scientist on Nuclear Arms**  
93WC0101A London *THE GUARDIAN* in English  
24 Jul 93 p 17

[Article by James Meek: "Fingers on the Buttons"]

[Text] Yakov Eisenberg has spent his life seeking the perfect parabola. More than three decades of patient cybernetics work, supervising other brilliant minds, honing the curves which would propel object A to point X, and from there on to point Y.

It wasn't all brainstorming with chalk, blackboard and computer. He would travel to the Baikonur launch site to be reminded that object A was often a Soviet intercontinental ballistic missile, that point X was up in space, and that in the most nightmarish outcome point Y was us, rendered into gas and glowing smithereens by the detonation of an equivalent 10 million tonnes of TNT.

Professor Eisenberg doesn't complain of nightmares. "Deep inside our souls all of us were absolutely sure that the things we made were never going to be used. Never," he said. "And in this sense it was just a very interesting game. In fact they are simply very interesting toys. You make a tank or a cannon, and your conscience could be tortured by the thought that someone might be killed with this weapon. But with our weapon—no one, never, because it would mean the end of life on Earth."

This particular game came to a sudden end for Eisenberg with the collapse of the Soviet Union in 1991. But the toys are still in place; 176 of them are located in Ukraine. So is Eisenberg. The professor is general director of a plant-cum-institute called Hartron, in Ukraine's second city, Kharkov, one of only two places in the former Soviet Union which designed and produced guidance systems for ICBMs (the other is in Moscow).

Only 20 miles from the Russian border, Kharkov is a predominantly Russian-speaking industrial city. But the blue and yellow Ukrainian flag flies over its administrative buildings and it did not actively support the recent anti-nationalist strike by Donbass miners.

Eisenberg appears committed to Ukrainian independence—committed enough to be lobbying Kiev to give him a contract to build a dual key system for the nuclear

missiles based in Ukraine, so that they cannot be launched by Russia without President Leonid Kravchuk's consent.

Eisenberg jabbed his thumb onto an imaginary button on the table as he made his point. "I have always thought and continue to think that in spite of the fact these missiles are Russian missiles, and the button is in Moscow, Ukraine as an independent state should have a second key. That means to launch a missile both Yeltsin and Kravchuk have to press the button.

"It would be very easy to make it so that they couldn't be launched at all. You could just cut a cable. But I'm not talking about that. I'm talking about a system that preserves the missiles as weapons that could be launched, only with two buttons."

He believes the mechanism should be created with Russia's consent, arguing that they would find out about it anyway. But he said he would be prepared to do the work even if Moscow said no. "This is a very hypothetical possibility. But I think if the Ukrainian government or parliament took such a decision, then we would do such work. Because, I say again, from the moral point of view I think that this is right."

This kind of talk is making brows furrow in Washington and other Western capitals, not to mention Moscow. They are worried that creating a dual key mechanism would be the first step to Ukraine having an independent launch capability. Did the professor think Hartron had the means to do that, if required?

"Why not? We are professionals. In principle we could make such a system as well. It would just take much longer, it would be hundreds of thousands of times more expensive."

Yakov Eisenberg is far removed from the stereotype of the messianic, or even the Soviet, scientist. He is more Richard Attenborough in *Jurassic Park* than Peter Sellers in *Dr. Strangelove*. He is a small, slightly nervous man with a disarming toothy grin and an earnest mission to explain, sprinkling his down-to-earth technical explanations with the Russian intellectual's love of cosmopolitan quotes.

He was born in Kharkov in 1934. His parents separated when he was very young; his mother was a shorthand typist, his father a doctor. He has lived in the city all his life, apart from evacuation to Siberia for four years during the second world war. As a Jew, he lived under the shadow of annihilation long before a second sun rose over Los Alamos.

He graduated from secondary school with a gold medal, which according to the rules meant he could get straight into the university physics faculty without an entrance exam. But there were unwritten rules, too. For Jews.

"When I came to present my documents the clerk said something would go wrong and I wouldn't be able to pass the medical examination... Einstein said that when he

had to face anti-Semitism he suddenly remembered he was a Jew." He went to Kharkov Polytechnic instead and studied radio engineering. His natural gifts must have shown through. Under the Soviet system graduates were posted to jobs by central decree, and he was despatched to the design bureau which, in 1959, began working on rocket guidance systems for the euphemistically named Ministry of General Machine Building. The name Hartron was the 1991 brainchild of a St. Petersburg consultancy.

For most of his career Eisenberg was head of the institute's theoretical department. Married with two grown-up children, he lived a comfortable life of relatively moderate privilege and restriction. He had a flat but no dacha. He could travel freely around the Soviet Union, except to border areas, but was forbidden to go abroad or speak to foreigners under any circumstances. He acquired a good car by Soviet standards, a Volga, but expert as he was at guiding hundreds of tons of metal into space, he never learned to drive.

There were moments of pride, with civilian rockets such as the Energia launch vehicle, and with military ones. "The Americans published data about the accuracy of their rockets, our people immediately translated it, and we were immediately told about it so that we could work better," he says.

Like so many Soviet citizens he learned to keep his feelings in separate compartments—patriotism and pride in his work in one, cynicism about the USSR and consciousness of anti-Semitism in another, and neither the less genuine for that.

"I'm in some ways amazed by people who say they did not understand everything in 1990. We did understand everything, but I'm going to quote not a Russian but an American proverb again—I like it: 'My country, right or wrong.' I was born here. It's my country."

In fact the country Professor Eisenberg was born in no longer exists. Jewish by passport, Russian by language and thought, Ukrainian by citizenship, he should be confused. He likes another word: adaptable. And he does speak Ukrainian, fluently.

Still, times are tough in independent Ukraine. No instructions have come to Hartron from Kiev to carry out works, even preliminary studies, on work with nuclear missiles. Scientists have put a few ideas on paper but so far it has gone no further. And Hartron is desperate for money.

The institute, which employs 11,000 people in Kharkov and at another, smaller site in Zaporozhe, is struggling to diversify. It has started to upgrade safety systems at Ukraine's five nuclear power stations. It is producing control systems for pipelines, turbines and chemical plants, as well as plastic metrotokens in use in Kharkov and Tashkent. It is assembling Chinese TV sets and making components for a US computer firm, and is eager for more foreign partners. It isn't enough. Nor, says

Eisenberg, is the money they receive from Ukraine's defence conversion fund. As for western funds intended to keep the former Soviet Union's top defence scientists on the straight and narrow, he has heard nothing.

More than a thousand of Hartron's best people have already left. Just before the latest round of wage increases a junior scientist was earning 40,000 karbovantsi a month, about four dollars at current exchange rates. Recently the institute's electricity supply was cut off because the bill hadn't been paid.

The professor is ambivalent about nuclear weapons. Hartron was never involved in building the warheads themselves; its control and guidance systems launched the rockets and guided them to the point where the bombs could be released to fall to earth "purely according to Newton's Laws."

He believes the weapons now in Ukraine will be removed within seven years, according to plan. At the same time he believes in the benefits of nuclear deterrence, quoting Bertrand Russell, Einstein and Margaret Thatcher to the same end.

Not far from Eisenberg's office is a little museum of Hartron achievements. There is a model of the Soviet space station, which it made control systems for; radio-controlled toy cars, another attempt at diversification; a picture of the SS18 missile in flight, the warheads clustered at the nose looking like garlic cloves around the stalk.

One exhibit counts the events of October 24, 1960, when a test missile blew up on the launch pad, killing 50 people—including Boris Konoplyev, Hartron's first chief designer. The date is kept free of launches to this day. For Eisenberg, who first saw one of "his" rockets fly only a few months later and who was directly responsible for steering cosmonauts safely into orbit, these nerve-wracking missions were a more real concern than the prospect of nuclear war.

"When I said there might be human victims... I'm very happy that there are no human victims on my conscience. Very, very glad. It would be horrible to feel guilty for the death of a human being." And Professor Eisenberg knocked on the wooden table in front of him.

#### U.S.-Russian Space Cooperation

##### Gore, Chernomyrdin Sign Space Cooperation Agreements

LD0309084193 Moscow ITAR-TASS in English  
0805 GMT 3 Sep 93

[By ITAR-TASS correspondents Pavel Vanichkin and Ivan Ivanov]

[Text] Washington September 3 TASS—The first session of the Intergovernmental Commission on Cooperation in Energy and Space ended on Thursday with signing a

package of documents on the development of cooperation in energy and space explorations.

Russian Premier Viktor Chernomyrdin and U.S. Vice-President Albert Gore who co-chaired the session, signed the Memorandum of Mutual Understanding between the Russian and U.S. Governments on the Export of Missile Technology, the Intergovernment Agreement on International Trade in Commercial Space Launchings and the joint statement on the development of cooperation in space explorations.

After the end of the commission's deliberations, the two statesmen also signed some other documents, including the memorandum of cooperation in fuel raw materials and the memorandum on measures of transparency to the Russian-American Intergovernment Agreement on the Use of Uranium Extracted from Nuclear Weapons.

Speaking after the signing ceremony, Gore said that it is high time for the United States and Russia to abandon the last vestiges of the Cold War and to develop new partnership relations.

Such partnership can yield the most impressive results for cooperation in high technologies. The two countries spent immense sums of money to compete each other during the Cold War, he continued. They achieved much, but they paid a high price for this.

The two nations can now cooperate in various spheres, including energy, space explorations, science and technology. Such cooperation is a mutually advantageous thing, since it considerably cuts costs of the two sides, the vice-president stressed.

Gore singled out a reached understanding on cooperation in space explorations, which is aimed at possible joint work in building a "truly international space station".

He noted that a project suggested by the heads of the two countries' space agencies and providing for the use of the Russian MIR space complex and American shuttles at the first stage of work, will considerably save resources of the two countries and enable them to cut by several years the time of functioning of the international space station.

The vice-president pointed to the great importance of signing the memorandum of mutual understanding between the two governments on the export of missile technology.

Russia's agreement to observe the Missile Technology Control Regime [MTCR], Gore continued, shows its readiness to be a responsible partner in sales of high technology. This is an extremely important step which is hailed by the United States, he added.

Chernomyrdin called the results of the first session of the Intergovernment Commission as "concrete and impressive." Under the present conditions in the world, economic cooperation with all its multiplicity is coming to the fore in Russian-American relations, he continued.

A mechanism to promote the development of economic, scientific and technical cooperation was set up for the first time at such a high level as a follow-up of the Vancouver understandings between the Russian and U.S. presidents.

The Agreement on International Trade in Commercial Space Launchings ensures Russia's access to the world high technology market, the Russian premier went on to say. The joint statements on cooperation in space research, aeronautics and environmental monitoring from space open new vistas for cooperation in space domestication.

An understanding was reached for future cooperation in building a manned space station of a new generation.

Commenting on the Intergovernment Memorandum of Mutual Understanding on the Export of Missile Technology, Chernomyrdin said that the document records Russia's intention to join the International Missile Technology Control Regime.

"We welcome the agreement on the MTCR and will strictly observe it in accordance with our understanding formulated at the end of the commission's joint meeting," Chernomyrdin stressed.

The Russian premier also praised the Memorandum of Cooperation in Fuel Raw Materials and the Memorandum on Measures of Transparency to the Intergovernment Agreement on the Use of Enriched Uranium Extracted from Nuclear Weapons.

The prime minister said that he invited Gore to visit Russia to co-chair the next session of the Intergovernment Commission. Apart from this, Chernomyrdin invited the U.S. vice-president to come to Russia on an unofficial visit.

#### Space Partnership Agreement Assailed

PM1609081393 Moscow ROSSIYSKAYA GAZETA  
in Russian 11 Sep 93 First Edition p 2

[Yuriy Konorov "Commentary": "Paper Promises"]

[Text] Everything has changed in the Russian home. Anyone can do any job he likes, however he likes. Even international treaties are being prepared not by professionals but by amateurs. Take, for example, the agreement on Russian-U.S. partnership in the exploration of space reached in Washington recently. It transpires that representatives of the Ministry of Foreign Economic Relations, the Foreign Ministry, and the Russian Federation Committee for the Defense Sectors of Industry did not actually take part in the final stage of the talks...

I am leafing through the pages of the agreement signed by Russian Premier Viktor Chernomyrdin, and it makes me want to weep. And with good reason. Under pressure from Washington Moscow has sacrificed the deal with Delhi for the supply of cryogenic engines. The farfetched pretext of the violation of the international Missile

Technology Control Regime [MTCR] makes you blush and want to apologize to the Indians when you meet with them.

Russia is not only losing a multimillion-dollar order for rocket engines which only the "professional engineer" Yuriy Koptev, director of the Russian Space Agency, thinks can be used for military purposes. The 100,000-strong work force of top-class specialists in the space sector will be left without work. But that is just the "first shock wave" effect. There is another behind it. India now has the right to express a vote of no-confidence in Russia and may review a number of previously signed agreements. For example, on the payment of its debt for state credits to the former USSR. As a result Moscow might not receive around \$15 billion from Delhi. Adverse consequences should be expected in other areas of cooperation too: the power industry, metallurgy, and so forth. India, which enjoys considerable influence in countries of the Pacific region, could make its neighbors consider the prospects of business ties with Russia.

Why are we prepared to pay such a high price? For U.S. promises to open the door for Russia to enter the international high technology market in space exploration. Unfortunately, the gap that they are offering us is narrower than the Biblical eye of the needle. Under this agreement Russia does not have the right to carry out launches at more than 7.5 percent below the world price. However, Russia today does not have the ability to offer the whole range of services at a standard commensurate with world prices: transport, hotels, ground observation throughout the flight, as well as Western levels of insurance to cover failed launches. Naturally we will lose out in competitions because we can win only if we play in our own "league." For us that "league" today means third world countries, which can afford our prices and find our conditions acceptable. But if under this agreement Russia tests its strength in the "big league," it will wind up out of its depth.

That is the precise aim of the terms of this cunning treaty. It has been drafted so skillfully by the U.S. side and examined so negligently by ours that a situation could emerge in which Russia is obliged to seek America's go-ahead not just to launch satellites produced by the United States (or with its help) but even those manufactured by Russia itself. The United States has also given us a "paper promise" to use Russian research in creating the Freedom orbital station. However, it should be remembered that neither the U.S. Congress nor Washington's Western partners have yet given the go-ahead to Russia's participation in the project, in other words, this is this strangest agreement that the world has seen for a long time.

The last hope now is the Russian Supreme Soviet, which made a decision in July to review the law on Russian affiliation to the MTCR. Since three documents on Russian-U.S. partnership in space were signed during the same visit to Washington it would be logical for

deputies to have an opportunity to make the appropriate amendments to those agreements.

### Television Report

*LD1509162293 Moscow Russian Television Network in Russian 1000 GMT 15 Sep 93*

[Report by correspondent Filippov; from the "Vesti" newscast]

[Text] More details about the Russian space program. At a news conference today, Yuriy Koptev, director general of the Russian Space Agency, reported that state financing of national space programs is only being implemented by approximately 50 percent. Of the 72 billion rubles allocated, only 37 billion have been transferred.

At the same time, U.S. partners are interested in our unique experience in aeronautics and space exploration. They are planning to allocate \$400 million to Russia for space research before the end of 1997. In 1994, our aerospace firms will receive \$100 million. This is the annual space budget of Argentina or Brazil. In reply, U.S. astronauts will make a series of lengthy flights on the "Mir 1" space station in 1995-1997. As reported by Yuriy Koptev, the main block of the "Mir 2" orbital station will be launched into space in 1996. A large U.S. module will then dock with it. By the end of the century, the station will receive a Japanese module and a module from the European Space Agency. International crews will work on the new station. Russian and U.S. experts are currently working on conditions for the participants in the project.

### Space Technology Developments

#### Use of SS-25 ICBM's as Space Launch Vehicles

*93WC0109A DELOVOY MIR in Russian 27 Aug 93 p 13*

[Article by Mikhail Rebrov: " 'Start-1' Project: Space and Profit Are Compatible Concepts"]

[Text] The strategic complex RS-12M (SS-25 under the NATO classification) needs no introduction. The solid-fuel missile can carry a nuclear warhead under the fairing of the front section. And it can deliver it with the greatest accuracy at a very great range. In the "table of classifications," it is shown as a menacing offensive weapon. I will add for my own account: it is the best in the world in its class. By the way, today all the verbs should be written in the past tense.

No, I do not intend to raise the theme "of beating swords into plowshares, for against whom are we going to fight?" It has outlived itself. And this is good. Something else is troubling: in the first version of the START Treaty, all SS-25's removed from alert status were subject to destruction. If you think about it, it was advanced engineering concepts, operational technologies, and production experience that were going "under the knife."

Fortunately, however, fate had something else in mind. Reason prevailed and the final version of the agreement permits the preservation of that part of the missile complex that is not considered to be strategic weapons. This is when the thought arose of creating a booster rocket on the basis of the SS-25 that will put commercial satellites into orbit. Along with everything else, the project, which was given the name "Start-1," made it possible to retain the highly qualified personnel of defense plants and design bureaus and to resolve the problem of employment and very effectively the tasks of conversion.

This is the prehistory of the project. Its actual history began more than four years ago with a misunderstanding or an unwillingness to understand. Two former premiers (Ryzhkov and Pavlov) refused capital investments for "solicitors," although the realization of the "Start-1" project promised not only to pay for itself but also profit. By the way, about the "solicitors." They are not adventurous organizations with a superficial understanding of the problem but solid firms: the manufacturing plant itself and the scientific-technical center "Kompleks," the Moscow Institute for Thermotechnics, the joint-stock company "I.V.K." (it is investing research and development), the plant "Barrikady," and a design bureau for precision instrument making.

Understanding came later, although the obvious rationality of the decision was evident even before. For the situation was this: the need for space satellite communications systems is growing every year and the launch of light space vehicles with the help of heavy booster rockets is not profitable for a number of reasons. In the first place, the launch of such rockets requires a lengthy preparation cycle; in the second place, the cost is high; and thirdly, the number of launch facilities for heavy boosters is limited and their sites are not always propitious. Perhaps the main thing is that the design and commercial structures that conceived the new complex were the first to go "from the idea to introduction," having done so after in-depth study of all possible nuances and a determination of a realistic time for the work.

What is the "Start-1" missile-space complex? I repeat that the basis of it is the modernized live missile SS-25 (a fourth stage has been added to it, giving a total length of 22 meters), for which the wheeled chassis has been replaced by a special transport platform. The delivery system is assembled entirely at the plant, is installed in a launch canister, and is delivered to the launch site either by rail transport or by aircraft or on a seagoing or river ship. It is possible to put a payload into a given orbit or into an intermediate orbit with subsequent establishment of a precise orbit with the propulsion system of the space vehicle. The payload can weigh up to 550 kg and the dimensions can be up to 1.3 cubic meters. The altitudes of circular polar orbits range up to 700 km.

Specialists distinguish five basic criteria that characterize "Start-1": design simplicity, high dependability (I

note: several dozen SS-25 missiles were destroyed by launch and there was not a single malfunction), ease of transport, the possibility of launch from any region (from equatorial and northern latitudes, from the shore of the ocean, etc.), and the putting of satellites into orbit with different inclined planes. To this one can add that the new missile-space complex removes all COCOM restrictions.

Since this is a commercial project, I tried to learn more about this aspect. This is what "I.V.K." Vice-President S.M. Zinchenko told me:

"We were attracted by the proposal of the defense people, for the very idea is interesting with respect to engineering and is very promising. An analysis of the international space market shows that on the order of 300 satellites built in the interests of different countries are waiting in line, as it were, for booster rockets. As was already noted, the cargo charge is high and for this reason interested firms are seeking advantageous partners. The use of 'Start-1' will cost the customer much less than market prices. According to some estimates, the price of a kilogram of cargo launched into space will be \$10-15,000 compared with the current \$20-30,000. No, this is not dumping but has to do with design features. We hope that our project will interest the Americans. They conceived an 'Iridium' communications system whose realization will require the launch of 77 satellites."

As for the prospects, the participation of Russia in the "Iridium" program will open our way to the world system of information and communication. And the "Start-1" project is just the beginning that may be continued very effectively.

I also found out that the project (one of the documents having to do with its realization under the number N 1521-p was signed by Ye. T. Gaydar on 19 August 1992) does not require a single kopeck from the state budget. Moreover 20 percent of the profit goes to the state treasury. The builders of the complex and its investors are aiming not only at the foreign market. They are counting primarily on internal orders. After all, there are many scientific centers in the CIS that are interested in inexpensive satellites for different kinds of research and ecological monitoring.

A specific example is the "Kuryer" system. It was conceived as a low-orbit communications system based on 60 small satellites and, in contrast to other space communications projects now being realized in Russia, it represents a very promising scheme. It is proposed that for commercial purposes the "Gonets" and "Signal" systems now operated on an experimental basis be put into effect in the near future. In short, everything that needs to be put into orbit already exists. It is a matter of delivery vehicles.

Such is the "Start-1" project in a few words. Is more commentary needed here? Apparently so, for questions may arise. And the first is: "Has private space arrived?" Yes, its first sprouts. But instead of the word "private,"

I personally prefer another—"commercial." It is time for us to realize that "space" and "profit" are compatible notions and that conversion means not only "demolishing" but also creation and efficiency from the use of new production. Further, "Will our advanced technologies not go away to other countries and be used there for military purposes (say, for that same SDI)?" Precise legal studies as well as control are needed here. But I submit that all of these questions can be resolved. And for now, "Start" has already begun. The first test launch of the rocket took place on 25 March of this year from the Plesetsk Space Launch Facility. Operational launches are coming in the future.

### **Journalists Shown New 'Rapana' Space Device**

*LD1309172193 Moscow Russian Television Network in Russian 1600 GMT 13 Sep 93*

[From the "Vesti" newscast]

[Text] A sensation for journalists who took part in a news conference at Flight Control Center today was the Rapana device, which was being shown for the first time. This is the basis of a future orbital station, a joint project which is being examined by Russia, the United States, and Europe. Antennae, reflectors, and solar gas turbine devices will in the future be installed on such orbital supports.

Rapana will have its premiere in orbit on 16 September. It will undergo its first tests. To carry this out, Cosmonauts Tsibliyev and Serebrev will undertake a space walk.

[Begin recording] [A.Chernyavskiy, designer of Energiya scientific-production association] During their first space walk the cosmonauts will carry out this unit to the Kvant module. [end recording]

On 20 September, during their second space walk, Tsibliyev and Serebrev will extend the Rapana to a length of five meters. The device is manufactured of 21st century materials and weighs 26 kgs. One other sensation was the revelation today of a designers' secret. Materials which can revert to their original state [materialy s pamyatyu formy] are being used in the new generation of space technology. Thus, Rapana can unfold in just 3 minutes. Then the crew will set up on it samples of aero-cosmic alloys for 10-month tests in outer space. The conversion of such devices in medicine, motor vehicle construction, and civil aviation will bring in billions of dollars. [Video shows device being explained by designers at conference, also a diagram of the device with captions]

### **Scientists Work On 'Buran' Space Shuttle**

*LD1709112193 Moscow ITAR-TASS in English 1007 GMT 17 Sep 93*

[By ITAR-TASS correspondent Veronika Romanenkova]

[Text] Moscow September 17 TASS—The multi-purpose aero-space system, now developed at the "Molnia" scientific-production society, will succeed the "Buran" shuttle. It is expected to be displayed at a show in Germany next May. The participation in this major display of the "Molnia" society, which is now experiencing serious financial difficulties, will give it a chance to earn money for a full-size model of the multi-purpose aero-space system, which will be a major step forward in its development, ITAR-TASS was told by Director-General and Chief Designer of the "Molnia" Society Gleb Lozino-Lozinskiy.

The "Buran" project may be mothballed in light of current financial difficulties, the specialist stressed. The "Molnia" leadership believes this would be a short-sighted step and does not want to keep mum about it, "because," Lozino-Lozinskiy said, "only Buran's successor, that is a multi-purpose aero-space system, is able to cope with the tasks now confronting space explorers". According to his calculations, further space research, from the point of view of economy, can now be effective only if the price of orbiting one kilogram of payload will be reduced by 87.5-90 per cent (today it equals to about 10,000 U.S. dollars). This end can be achieved only by means of a multi-purpose aero-space system, the specialist claims. He added that this system could also be used to carry supplies to orbital systems and to conduct scientific studies.

In light of the current economic crisis, the "Molnia" society is compelled to seek foreign partners, although it realises that it will have to share with them its property rights to the new system. Therefore, the financial participation of Russian investors in this project is more attractive for Russian experts. Lozino-Lozinskiy said that there was a real chance that the multi-purpose aero-space system would be supported by the Aviation Bank (Aviabank), which has decided to take part in financing fundamental scientific research.

### **Space Industry Faces Challenges**

#### **Space Forces Publicised**

*LD3008205893 Moscow ITAR-TASS World Service in Russian 1340 GMT 30 Aug 93*

[By ITAR-TASS correspondent Veronika Romanenkova—all quotation marks as received]

[Text] Moscow, 30 Aug—The main purpose of the Military Space Forces (VKS) of the Ministry of Defense (MoD) of the Russian Federation (RF) taking part in the Moscow aerospace salon (MosAeroshow '93) is to make it known that there are "real space forces" in Russia which are capable of functioning under new economic conditions, said VKS Commander Lieutenant General Vladimir Ivanov to an ITAR-TASS correspondent today, the day before the opening of the exhibition.

The commercialization of space is one of the possibilities for overcoming the difficult situation in the industry.

since "the MoD has many tight corners" as well, thinks one specialist. Baykonur Cosmodrome alone needs 38 billion rubles a year.

In the words of Vladimir Ivanov, there are still certain difficulties in the field of international cooperation, since "we still do not have sufficient experience." But there are a number of issues which countries cannot resolve alone, and experience of cooperation must be acquired, the VKS commander is convinced.

He emphasized the VKS has [made] a range of interesting proposals for joint action on international projects. "We are ready for work of this kind," said Vladimir Ivanov. The VKS can put about 10 different modifications of cargo rocket (RN) on the market, including the "Kosmos" RN for launching low-orbit satellites for various purposes, the "Meteor-3" meteorological spacecraft, and the "GLONASS" global navigation satellite system.

#### Space Agency Official on 'World Standards'

LD3108220593 Moscow ITAR-TASS World Service  
in Russian 1258 GMT 31 Aug 93

[By ITAR-TASS correspondent Veronika Romanenkova]

[Text] Moscow, 31 Aug—"Our space industry is Russia's only industry that corresponds to world standards", stated Valeriy Alaverdov, first deputy director general of the Russian Space Agency in an interview for ITAR-TASS today, coinciding with the opening of the first Moscow aerospace show. He said that despite complicated economic conditions, not a single space priority has been neglected and the exhibits at the show confirm this.

The Russian Space Agency's exhibition can be divided into four main sectors: Space equipment serving the needs of the national economy and theoretical science, manned flights, and orbit delivery vehicles. They all represent the most important directions in the agency's activities, and resources are being channelled toward them. Among the new projects that are soon to be tested in practice, Valeriy Alaverdov named the space vehicle "Okean-O", designed to serve the needs of the fishing industry, the "Almaz-1B" automatic space monitoring station, the "Spektr" vehicle, designed for theoretical research, and the "Mars" vehicle, due to be launched next year. The United States, France and European countries are taking an active part in the project to study the planet Mars.

#### Huge Cash Influx Needed

LD0209152393 Moscow ITAR-TASS in English  
1411 GMT 2 Sep 93

[By ITAR-TASS correspondent Veronika Romanenkova]

[Text] Moscow September 2 TASS—Russia's space industry urgently needs at least 110 billion roubles to overcome the negative processes developing in the industry, Valentin Stepanov a high-ranking official of the Russian space defence industry, said.

Speaking at a news conference held within the framework of the Moscow aerospace show on Thursday, Stepanov said that now as never before the industry needs state support. This should include both financing and preservation of traditional ties with former Soviet republics. At the same time, he stressed that the Russian space industry "is the pearl of national science and technology" which could make a substantial contribution to the development of economic reform in Russia.

The aerospace show features a wide variety of exhibits (many of them have never been on display before) which can attract not only state organisations, but also private companies and foreign businesses. Unfortunately, more than half of what the industry can offer now remains undemanded, Stepanov regretted.

However, Vladimir Ivanov, commander of the Russian Space Forces, said that "many proposals and arrangements" have been made at the show. They will be considered by Russian Defence Minister Pavel Grachev after the end of the exhibition, Ivanov said.

#### Commentator Views 'Nightmare' State of Space Program

LD0609154393 Moscow Radio Moscow World Service  
in English 0710 GMT 6 Sep 93

[Text] Moscow mailbag, and here's [commentator] Joe Adamov to answer more of your questions. The first one comes from Arthur Boston of Liverpool in England, and he asks: Is the Russian space program now finished?

[Adamov] Well, it's not finished, but it's experiencing what I would call a nightmare. Twenty-one thousand people have left the community adjoining our main cosmodrome, Baykonur. The clubs and movie theaters there are closed. Pedestrians dart in and out of stores in search of food, and during a whole week bread was not delivered.

The refrigerators in the stores are not working. In one place, sausage was lying in tropical heat covered by flies. Today, the Baykonur cosmodrome is the property of the Republic of Kazakhstan, but they have neither the technology nor the personnel to keep it in working condition.

The military space forces, so-called, in charge of the launching site, lack personnel—lack soldiers. The rocket that launched the recent Russian-French crew was guarded not by just plain soldiers, but by officers. The construction of new objectives at Baykonur has been stopped. [as heard] The functioning ones are quickly becoming inoperative. Russia is keeping the functioning

of the cosmodrome at the very lowest level, not wishing to finance out of its own pocket the property of another nation.

Theft at the launching pads and the technical sites has become normal and is not noticed. Everything is stolen, even copper cable laid underground or sheet metal which is used for roofing. This chaos is beginning to tell, very unfortunately, on the dependability of the launchings. In June, the heavy carrier rocket Proton, carrying the communications satellite Gorizont, fell into the Pacific Ocean. Why? Because they didn't fill enough fuel into the tanks. I have a feeling someone must have stolen some of it.

The launching complex of the Proton—the most reliable Russian rocket—became so broken down and dilapidated that the rocket was moved to another pad. An hour before the Russian-French crew launching, the electricity failed at the pad, but after the launching, the whole town was blacked out.

People are leaving the place en masse. There are two and a half thousand officer vacancies. Schools have become half deserted. Kindergartens are closed. Crime, drug addiction, robberies, theft are all common place. Women, even in daytime, are afraid to go out. They go swimming accompanied by large dogs.

And here's the latest: soldier rebellions. In June, these rebellions resulted in burning down three barracks, three staff buildings, a club, a hospital, and a library.

The only way out is to try and use our great space facilities for commercial purposes by launching foreign satellites, but that will not be easy to bring about.

#### **Nizhniy Novgorod Arms Fair Focuses on Ammunition, Chemicals**

*LD0909213293*

[Editorial Report] Moscow Radio Rossiia Network in Russian at 1600 GMT on 9 September broadcasts a 3-minute report by correspondent Igor Stanovov on the exhibition, "Weapons, military equipment and conversion," which is continuing its work in Nizhniy Novgorod. Each day of the fair is dedicated to one of the branches of the defense complex. Today it focused on ammunition and military chemicals.

Stanovov, reporting from Nizhniy Novgorod, says: "One could see the famous high-precision Tochka-U missile systems, 150-mm MSTA-S howitzers, infantry fighting vehicles, noiseless pistols without the traditional sound suppressors and flash hiders, and optical devices of world precision standards." He says that all these products could be used in civil industries and that some western companies are interested in them.

Stanovov adds: "According to experts, our advances in the area of rocket fuel are about 20 years ahead of the Americans, and while with every Shuttle launch some 300 tonnes of hydrochloric acid is released into the

atmosphere, Russian rocket fuel causes no harm to the environment as it burns." Among other peaceful uses of military equipment and technologies equipment, Stanovov lists aerosol fire extinguishing systems, diamonds produced from rocket fuel, and modern medicines for cardiovascular patients, which used to be imported, he adds.

#### **Chechnya Reportedly Parades SS-20 Missile Launcher**

*LD0909200993 Moscow Russian Television Network in Russian 1900 GMT 9 Sep 93*

[From the "Vesti" newscast]

[Text] The POSTFACTUM agency asserts that, according to the Chechen presidential press service, a SS-20 missile launcher appeared in a parade which was organized in honor of the second anniversary of Chechnya's independence. True, there was just one. I would remind you that the SS-20 missile has a range of 2,000km. According to the agency, the president's press service could not explain where the Chechen armed forces obtained this missile.

#### **Defense Industry Conversion Not Producing Expected Results**

*LD0909185693 Moscow ITAR-TASS World Service in Russian 0953 GMT 9 Sep 93*

[By ITAR-TASS correspondents Nikolay Krupenik and Lev Frolov]

[Text] St. Petersburg, 9 Sep—In Russia, the 770 enterprises of the former military-industrial complex are now undergoing conversion, but 160 are on the verge of coming to a standstill or are out of operation. Volume of military orders fell last year to 30 percent of the 1991 level. Especially alarming is the situation regarding defense science, which has lost up to one-quarter of its intellectual potential because of the collapse of military orders and the lack of finance for research and development. Government measures to financially stabilize defense enterprises have been unable to halt the slump in production. This data was cited at the international conference "Research Intensive Technologies and Conversion-93" by Viktor Glukhikh, Chairman of the Committee for Defense Industries.

As regards the complexity of the aims of military-industrial conversion, Russia is unrivaled. This is explained by the unprecedented scale of reduction in plants making weapons and military equipment and economic reform as a whole. However, having proclaimed in 1988 the political decision on conversion, the state started implementing it straight away, which undoubtedly did not produce the expected results, Viktor Glukhikh stressed.

Even though the conversion program has yet to be approved in parliament, a package of 14 industrial

programs has been put together. A preliminary assessment of the cost of implementing them in 1993 is R [rubles] 554 billion. However, guaranteed funding has been promised for two projects only: The development of civil aviation and the revival of the Russian fleet. The current deficit for conversion needs is R80 billion.

Glukhikh believes that the military-industrial complex should become an industry that earns foreign currency. Experts have estimated that demand for Russian military equipment could amount to \$25-30 billion per annum, but volume of sales is dwindling. Seven years ago the former Soviet Union sold 38 percent of all exported weapons, with the United States accounting for 30 percent. Russia's share has now fallen to 17 percent, while that of the United States has reached 58 percent.

Glukhikh believes that the mechanism of conversion should be as follows: A list should be compiled of enterprises of the former military-industrial complex whose products are in demand on the world market, a state order should be established for them, they should be granted tax discounts, legal protection, and other incentives. Enterprises whose products do not find a market should be subjected to compulsory conversion and switched to civilian production. They should be privatized.

## BELARUS

### U.S. Helps With Control of Nuclear Components

*LD3008211793 Minsk Radio Minsk Network  
in Belarusian 1000 GMT 30 Aug 93*

[Text] At the current stage, the United States is particularly attentive toward the organization of export control in the CIS republics containing former USSR strategic nuclear weapons. As our defense minister told a ZVYAZDA correspondent during the above-mentioned visit to the United States [of Belarusian delegation headed by Stanislaw Shushkevich], in particular special equipment will be installed at Belarusian customs posts, border posts, and crossing points that will prevent both import to and export from Belarus, or transit through its territory, of any nuclear components.

In reality, last year's U.S.-Belarusian agreement concerning a line of permanent communication has almost been implemented. In accordance with that agreement the United States has allocated 2.3 million dollars. The mentioned equipment from the United States has already been installed in the National Center for Control and Inspection. The official launch of that line is planned for the last day of the this summer, 31 August 1993.

### Delegation to Missile Destruction Commission Named

*WS0809142993 Minsk Radio Minsk Network  
in Belarusian 0505 GMT 8 Sep 93*

[Text] The Belarusian Cabinet of Ministers has issued a resolution designating members for the Belarusian delegation to the special Control Commission created in accordance with the 8 December 1987 agreement on dismantling short- and intermediate-range missiles. The delegation includes Aleksandr Baycharay, chief of the International Security and Disarmament Department at the Belarusian Foreign Ministry, and Deputy Defense Minister Ivan Osipa, among others.

### Arms Reduction Treaty Causing Financial Difficulties

*LD3008215693 Minsk Radiostantsiya Belarus  
International Service in Belarusian 1800 GMT  
30 Aug 93*

[Text] Belarus is one of the countries that adheres strictly to all the clauses of the Treaty on Reduction of Conventional Arms in Europe. So far, 369 tanks, 207 military personnel carriers, 261 armored personnel carriers, and 28 aircraft have already been destroyed. Naturally, large resources are needed for that—33 million dollars. The republic does not have this money. The foreign affairs minister of the republic, on the government's instruction, has appealed for help to some countries. The United States, the United Kingdom, and Germany replied. But they offer technologies for destroying military machinery, not money. We have technologies of our own which are excellent and even cheaper than those offered to us, noted (Viktar Vakar), head of the National Agency of the Republic for Control and Inspection in an interview.

Will it be [word indistinct] to sell that machinery? In accordance with the treaty, reduction of military machinery can be carried out either through liquidation or reequipping of military machines into peaceful machinery: Tractors, cranes, and bulldozers. It is forbidden to sell the machinery eligible for reduction, stressed (Viktar Vakar).

Despite financial difficulties, the process of reduction of the Armed Forces is carried out according to the schedule. By 16 November, the end of the first stage of the reduction, a quarter of the machinery earmarked for liquidation will have been destroyed. There is another point—we are destroying, according to (Viktar Vakar), obsolete systems—T54, T55, and T62 tanks. The machinery that will remain in the republic after the implementation of the obligations imposed by the treaty will suffice for defense of the sovereignty and independence of the state.

## KAZAKHSTAN

### Lists of Tests at Semipalatinsk

93WC0114A Alma-Ata ATA MEKEN in Kazakh  
14 Aug. 93 p 4

[Article by Toqtasyn Saybekov: "Impact of Nuclear Explosions in Semipalatinsk"]

[Excerpts] Only in recent times has it become possible to gain access to the materials of the Semipalatinsk Testing Area which have hitherto been kept entirely secret due to long term conservatism and oppression.

What kinds of materials are these kept under such tight lock and key for so long? Why do we need them? They are information about radioactive contamination of the area and about the doses (exposure) received by the people living in the area subject to the influence of radioactivity.

In 1992 a commission, set up by the Apparatus of the President of the Republic and the Cabinet of Ministers, began work at the Military Administration in Kurchatov City. It was comprised of representatives of the Ministry of Ecology and Biological Resources of the Presidential Apparatus and Cabinet of Ministers, of the Nuclear Institute of the Academy of Sciences, of the Kazakhstan Ministry of Health, of Kazgidromet, of the Al-Farabi atyndaghy State University, of the "Nevada-Semey" Anti-Nuclear Movement, of the Semipalatinsk Oblast Executive Committee, and of the Oblast Committee for Ecology.

During its period of work, the committee examined archival materials on radioactivity in the region where nuclear weapons were tested in the Semipalatinsk Testing Area between 1949-1989.

During the period of testing, a total of 470 explosions took place in the testing area. Some 26 of them on the surface, 90 in the air (Table 1), and 353 underground (Table 2). In addition, there were 75 experimental explosions of non-nuclear explosives in the testing area, including 44 explosions of more than 10 tons power (Table 3).

Table 1: Surface and Air Nuclear Explosions in the Semipalatinsk Testing Area, 1949-1962

Year	Total Tests	Air Tests	Surface Tests
1949	1	1	
1951	2	1	1
1953	5	1	4
1954	8	1	7
1955	5	3	2
1956	8	2	6
1957	11		11
1958	10		10

1961	27	6	21
1962	39	11	28
Total	116	26	90

The total includes three non-nuclear explosions.

Table 2: Underground Nuclear Explosions at the Semipalatinsk Testing Area, 1961-1989

Year	Tests
1961	1
1962	1
1964	7
1965	12
1966	14
1967	15
1968	14
1969	13
1970	10
1971	15
1972	15
1973	9
1974	15
1976	16
1977	16
1978	20
1979	22
1980	18
1981	15
1982	11
1983	17
1984	16
1985	10
1987	19
1988	12
1989	8
Total	354

Table 3: Surface and Subsurface Experimental Non-Nuclear Explosions in the Semipalatinsk Testing Area, 1970-1988 (more than 10 tons power)

Year	Total Tests	Surface Tests	Subsurface Tests
1970	1		1
1972	1		1
1973	3		3
1974	3	1	2
1975	1		1
1976	3	1	2

**Table 3: Surface and Subsurface Experimental Non-Nuclear Explosions in the Semipalatinsk Testing Area, 1970-1988 (more than 10 tons power) (Continued)**

Year	Total Tests	Surface Tests	Subsurface Tests
1977	1	1	
1978	1	1	
1979	3		3
1980	4		4
1981	4		4
1982	5	2	3
1983	2	1	1
1984	6	4	2
1985	1	1	
1987	3	2	1
1988	2	1	1
<b>Total</b>	<b>44</b>	<b>15</b>	<b>29</b>

Some of the explosions inflicted a very great deal of damage on the health of the people living in the region about the testing area. This was mostly the result of atmospheric tests carried out during the first period of the activity of the testing area. Table 4 shows, by way of example, one portion of rayon areas of Semipalatinsk Oblast near the testing area which suffered contamination by radioactivity.

**Table 4: A Portion of the Region Containing Rayon Subject to Contamination by Radioactivity**

Date of Test	Abay Rayon	Zhangasemey Rayon	Besqaraghay
29 Aug 1949			0.10
24 Sep 1951	0.24		
18 Oct 1951	0.20		
12 Aug 1953	0.24		
3 Oct 1954	0.02		
5 Oct 1954	0.02		
23 Oct 1954		0.44	
26 Oct 1954		1	20
30 Oct 1954	0.02	0.26	
29 Jul 1955		0.26	0.45
2 Aug 1955	0.06		
6 Nov 1955	0.04	0.22	
22 Nov 1955		0.04	0.85
16 Mar 1956	0.06	0.67	0.05
24 Aug 1956	0.04	0.40	
30 Aug 1956		0.11	
10 Sep 1956	0.06	0.04	0.60
17 Nov 1956		0.04	
3 Apr 1957	0.02		0.05
10 Apr 1957			0.05

**Table 4: A Portion of the Region Containing Rayon Subject to Contamination by Radioactivity (Continued)**

Date of Test	Abay Rayon	Zhangasemey Rayon	Besqaraghay
26 Aug 1957			
17 Jan 1958		0.07	0.40
18 Mar 1958			0.50
1961-1962	0.04		0.05

According to specific materials examined by us, radioactive clouds from explosions covered varying areas and their sizes and power were also varied in quantity.

**Table 5: The Most Important Air and Surface Tests Having Permanent Environmental Impact**

Date of Test	Type	Primary Path of Radioactive Cloud
29 Aug 1949	surface	northeast
24 Sep 1951		south-southeast
18 Oct 1951	air	southeast
12 Aug 1953	surface	
3 Sep 1953	air	northeast
10 Sep 1953	air	northeast
23 Oct 1954	air	east
26 Oct 1954		east
29 Jul 1955	surface	northeast
2 Aug 1955	surface	south
22 Nov 1955	air	northeast
25 Mar 1956	surface	southwest
16 Jul 1956	surface	northeast
24 Aug 1956	subsurface	east
10 Sep 1956	air	northeast
22 Aug 1957	air	southwest
17 Jan 1958	air	northeast
9 Sep 1961	surface	northeast
10 Sep 1961	air	northwest
17 Sep 1961	air	northeast
7 Aug 1962	surface	east-northeast
25 Sep 1962	surface	east-northeast

#### Arms Reduction Agreement Reached With Uzbekistan, Russia

*LD1109105193 Almaty Radio Almaty World Service in English 1830 GMT 10 Sep 93*

[Text] Kazakhstan, Uzbekistan, and Russia have agreed to implement the former Soviet Union's treaty on the reduction of conventional weapons. After the meeting between the foreign ministers of the three republics in Tashkent, capital city of Uzbekistan, the three former Soviet Union republics agreed to destroy 6,000 tanks, 7,000 minor artillery systems, and 1,500 armaments [as

heard]. This agreement will (?relate) to the (?liquidation) and conversion of some military equipment in accordance with the USSR's obligations under the agreement on conventional weapons in Europe signed in 1991.

### Anti-Nuclear Congress Held

#### Nazarbayev Assails Nuclear Tests

LD3108225493 Almaty KAZTAG in Russian  
1400 GMT 31 Aug 93

[Excerpts] [no dateline as received]—An international anti-nuclear congress began its work in Almaty on 30 August. Attending it are representatives of anti-nuclear movements of foreign countries. [passage omitted]

President Nursultan Nazarbayev addressed the participants of the congress. He said that the nuclear test at the Semipalatinsk nuclear test site on 29 August 1949 opened a new page in the history of Kazakhstan. Inhuman nuclear tests, which were carried out for many years, caused severe economic, cultural, and social consequences. [passage recalling decree closing Semipalatinsk test site omitted]

Nursultan Nazarbayev said that with the closure of the nuclear test site, Kazakhstan's parliament and government adopted decisions on eliminating the aftermath of nuclear tests and improving the environment along with experts of the "Nevada-Semipalatinsk" movement. For the first time in the history of the republic, so much attention is paid to people's security. However we don't think that we will manage to deal with this problem without international support.

Kazakhstan, first of all, needs technological, engineering, and ecological help from the countries that have such experience. A deep socio-ecological expert inquiry into such projects and programs, including at the international level, would not be superfluous. This could more quickly remove the radiation phobia which has gripped our population, and a certain ignorance in these matters.

Addressing those attending the congress Nursultan Nazarbayev stressed that we must not allow pessimism and social hopelessness to escalate. The president noted that various demands for solving ecological problems will not replace concrete work in this area. The president went on to say that we have to bury radioactive waste in our territory - scholars and engineers together with representatives of the public should find the optimum, from the safety point of view, draft project. So far there is not a single facility in Kazakhstan which can ensure safety control over radioactive waste.

The problem of using the nuclear warheads' plutonium is also important for the republic. It should be solved in accordance with international treaties. [passage omitted on need to support victims of nuclear tests]

Touching upon the socio-ecological aftermath of nuclear tests, Nursultan Nazarbayev noted that scholars and

officials openly talk only about quantity, location, and types of nuclear tests. But the question should be formulated more broadly. Full comprehensive ecological assessment of the impact of the nuclear tests on the environment and the population should be carried out. With this aim in mind an authoritative international commission (similar to the one set up after Chernobyl) should be established.

The president expressed the readiness of Kazakhstan to initiate the creation of a common global register with the names of all those who have suffered from nuclear tests. This work could have been carried out by the WHO and international ecological organizations. Mankind still bears enormous losses as a result of nuclear tests. In particular, we are concerned by the ecological effects of nuclear explosions at the Chinese Lop Nor test site. Scientific circles are concerned at the aftermath of Lop Nor on our nature and the health of the people. Nursultan Nazarbayev believes in this regard that a broad field for cooperation arises on eliminating the effects of these tests in the interests of the peoples of our countries. Chinese and Kazakhstan scientists and business circles could by joint efforts substantially improve the condition of this region, for radiation knows no frontiers. Moreover, it is important to seek out together effective forms of cooperation and to avoid extremist and unsanctioned actions which could inflict harm on the noble efforts of the anti-nuclear movement.

The president stated that for Kazakhstan radio ecological safety is most important in the overall system of priorities of ecological safety. [passage omitted on legislation already adopted in ecological field, need for support by private business]

Nursultan Nazarbayev supported the initiative of the anti-nuclear movement for devising a programme "Reviving the Earth and Man" which outstrips certain state scientific projects in the problems of radio-ecological safety and rehabilitating victims, and in developing problems relating to the ecological status of social protection zones for victims. He expressed confidence that in the end the movement will achieve its aim—a total ban on all kinds of tests for atomic and other types of weapons. [passage omitted]

### Memorandum Adopted

LD0109202993 Moscow Radio Moscow World Service  
in English 1800 GMT 1 Sep 93

[Text] The congress of the global anti-nuclear alliance being held in the capital of Kazakhstan, Almaty, drew to a close on Wednesday. The participants adopted a memorandum calling for the earliest introduction of public and state control over the ecological safety of the planet. The congress called on those CIS countries having nuclear arms in their territory to set up a common security council and transfer all nuclear weapons to the council's jurisdiction. The congress backed up the appeal of President Nursultan Nazarbayev of Kazakhstan to the

heads of nuclear powers to prolong the moratorium on nuclear testing until the year 2000.

### Confusion Over Status of Baykonur Cosmodrone

#### Privatization of Baykonur Cosmodrome Planned

LD0209093293 Moscow Mayak Radio Network  
in Russian 0330 GMT 2 Sep 93

[Text] Russian and Kazakhstani experts are working on the possibility of turning the Baykonur Cosmodrome into an open-type joint-stock company. It is proposed that (Tokhtar Albikirov), the head of the Aerospace Agency of Kazakhstan, will hold a meeting today with representatives of the Russian military space forces. Kazakhstan President Nursultan Nazarbayev recently came out with the initiative to give the cosmodrome a new status. His proposal envisages that the first shareholders should be Russia, Kazakhstan, and Ukraine.

#### Newspaper Says Russia Pulling Out

LD0509103293 Moscow Mayak Radio Network  
in Russian 0700 GMT 5 Sep 93

[Text] NEZAVISIMAYA GAZETA reports that the Russian leadership has decided to break off all links with the Baykonur space center and no longer make use of it.

A Glavkosmos spokesman, Andrey (Sergeyu), commented that he knew nothing about this. Kazakhstan's failure to pay its share of the cosmodrome's budget should not lead to this kind of decision. Russia has too great an interest in the cosmodrome, he said.

#### Glavkosmos Aide Knows 'Nothing'

PM1609080193 Moscow ROSSIYSKAYA GAZETA  
in Russian 14 Sep 93 First Edition p 4

[Report "based on POSTFACTUM material" under "Yesterday, Today, Tomorrow" rubric and general heading "Space": "Grounded by Debts"]

[Text] It has been learned that the Russian leadership has decided to sever all ties with the space complex at Baykonur and to stop using it.

Commenting on this report, Glavkosmos [Main Administration for the Development and Use of Space Technology for the National Economy and Scientific Research] representative Andrey Sergeyuk stated that he knew nothing about this decision and that the fact that Kazakhstan is not contributing its share toward the cosmodrome's budget should not form the basis for such a decision—Russia's has too great an interest in the cosmodrome. A representative of the "Transmash" design bureau who did not give his name stated that the Kazakhstan side is very interested in earning profits from Baykonur's utilization, in particular from the launch, scheduled for 1996, of the "Almaz 1C" space vehicle, which is being developed at the design bureau.

### UKRAINE

#### Nuclear Warheads Heating Incident

##### Russian Nuclear Experts Called To Site

PM1309153093 Moscow KRASNAYA ZVEZDA  
in Russian 14 Sep 93 p 1

[“Own information” report: “Let’s Hope They Don’t Land Themselves in Trouble...”]

[Text] It has become known to the editorial office that on Sunday 12 September a group of experts from the Russian Federation Ministry of Atomic Energy and the Russian Federation Defense Ministry flew to a nuclear-technical unit stationed on Ukrainian territory. The group includes chief designers and developers [razrabotchiki] of nuclear munitions. The Russian nuclear experts were invited by Ukrainian Prime Minister Leonid Kuchma.

The reason: In the unit's storage facilities there had been a change in temperature conditions for the storage of nuclear munitions which are currently being removed from combat status by Ukrainian specialists. It has not been confirmed that it was the nuclear munitions that caused the original change in the temperature parameters. But the experts from Russia have already noted a gross violation of norms for the storage of nuclear munitions in this technical unit's storage facilities. The munitions considerably exceed the established norms, and this led to a sharp increase in background radiation, which became unsafe for the health of service personnel.

It is well known that the Russian Federation Defense Ministry has repeatedly and persistently proposed that nuclear munitions be relocated from Ukrainian territory to Russia. And that the nuclear safety situation thereby be normalized. However, these proposals have gone unanswered. Political ambition prevailed.

Sunday's incident is seen as the first and highly serious warning sign. Let us hope it does not become an alarm signal.

#### IZVESTIYA Says Ukraine's Nuclear Warheads Overheating

PM1409181593 Moscow IZVESTIYA in Russian  
15 Sep 93 First Edition p 1

[Viktor Litovkin report: “Nuclear Warheads ‘Running a Temperature’ in Ukraine. Russian Specialists Fly Out To Treat Them”]

[Text] IZVESTIYA has learned that the temperature has risen abruptly in a nuclear warhead storage facility located at Pervomaysk in Nikolayev Oblast. The Russian leadership was informed of this by Ukrainian Prime Minister Leonid Kuchma. A group of specialists from the Ministry of Atomic Energy including the chief warhead designer and the people who constructed the

weapons [boyepripasy], as well as people from the Russian Ministry of Defense immediately flew out to Ukraine.

We asked Major General Vitaliy Yakovlev, deputy chief of staff of the Russian Ministry of Defense main directorate which specializes in nuclear weapons, to comment on this incident. He said that no accident has occurred at Pervomaysk, although the symptoms are very alarming. It indicates a gross violation of the nuclear safety rules and the norms for servicing special weapons.

The general stated that right now it is still too early to say for sure why this has happened. A competent commission is at work in Pervomaysk, and it would not be right or advisable to anticipate its conclusions, especially as nuclear weapons installations are a state and military secret. But there can be no doubt about one thing: This is not a case of negligence, unprofessionalism, or evil intent. What has happened is a result of the political approach to the problem of nuclear weapons which currently pertains in Ukraine.

It is well known that on 2 July the Ukrainian parliament declared its ownership of these nuclear weapons, thus subordinating to itself the last Russian subunits engaged in monitoring the state of the nuclear warheads and carrying out maintenance. Russia was deprived of the opportunity to carry out any scheduled maintenance or ensure the delivery of spare parts for these weapons.

By servicing these weapons, Russia would have recognized Ukraine's right to possess nuclear weapons, which would have been an extremely gross violation of the Non-Proliferation Treaty by a depositary state, which is what Russia is. But, on the other hand, Ukrainian specialists cannot service these weapons on their own since they lack the appropriate material and technical base and the necessary spare parts.

From the technical viewpoint it is also inadvisable to keep unserviced nuclear warheads attached to strategic missiles, as the specialists obscurely put it. They are removed from the missiles and placed in special storage facilities, which have now become overcrowded. This is the reason why background radiation has increased several times in this facility, thus becoming a danger to the health of people working in the installation, and why the warheads themselves are beginning to "react" to the closeness and congestion. But huge sums are needed to build new storage facilities. And this at a time when, under its international obligations, Ukraine must remove nuclear weapons from the republic's territory.

The agreements signed in Crimea between Viktor Chernomyrdin and Leonid Kuchma—we have learned, incidentally, that the full text of these agreements is to be published in the near future—envision the recall of these weapons (of which there are approximately 2,000) to Russian territory and their disassembly at Russian enterprises, for which Ukraine will receive appropriate compensation.

Russia has proposed starting this recall immediately, as soon as the bilateral commission—under the agreement its work has been planned for September—compiles a timetable for transporting the charges. According to Russian Atomic Energy Minister Viktor Mikhaylov, this will take 18-20 months in all. But the Ukrainian side deemed this time frame too short. The Russians have agreed to clarify the matter during the talks in September and October, but the commission members from both countries have not yet been appointed.

Meanwhile the nuclear weapons cannot wait. They are making their presence felt not just through changes in temperature and an increase in the radiation level (the specialists have a good idea what lies behind this), but also through other alarming signals. But for some reason the politicians cannot hear them.

#### **Ukrainian Press Denies Charge**

*LD1509174993 Kiev UKRINFORM in Russian  
1350 GMT 15 Sep 93*

[Text] [No dateline as received] The situation at the warhead storage base in Pervomaysk is normal, reports the press service of the Ministry of Defence of Ukraine.

Some foreign mass media have presented the currently existing situation at the missile troops facility, located in the district of the town of Pervomaysk, as an extraordinary occurrence.

In connection with this, the press service of the Ukraine Defense Ministry has circulated a report which notes that the situation at such facilities has never got out of control of the relevant Ukrainian services and the Russian specialists, who regularly implement measures of guaranteed supervision [garantiyny nadzor] of the places of storage of nuclear ammunition [yadernye boyepipasy].

In accordance with the appeal by Ukraine's prime minister to the Russian side, a joint working group has been set up to check the state of facilities and to improve the conditions of servicing and of protracted storage of nuclear ammunition.

#### **Implications Viewed**

*PM1509171193 Moscow KRASNAYA ZVEZDA  
in Russian 16 Sep 93 p 1*

[Report by Major General Vitaliy Yakovlev, deputy chief of the Russian Federation Defense Ministry Main Administration staff, and Captain Second Rank Aleksandr Pelets of KRASNAYA ZVEZDA: "Ukraine's 'Nuclear Mace' Has Been Overheated. Will That Cool the Arrogant Politicians?"]

[Text] Let us hasten to reassure readers and avert possible panic-stricken conclusions. Everything now taking place at the Ukrainian nuclear-technical units stationed

in the region of the small town of Pervomaysk (Nikolayev Oblast) is not actually an accident. But it gives very serious grounds for thinking and, most importantly, drawing conclusions.

And so on 12 September at the request of Ukrainian Prime Minister Leonid Kuchma a group of Russian Federation Defense Ministry officers and specialists from the Russian Nuclear Energy Ministry and the chief designer-developers of nuclear warheads arrived urgently in Pervomaysk. The reason for calling them in so urgently was more than serious: The air temperature readings had changed at the unit's special storehouses where nuclear warheads were stored. In other words, the warheads had begun to heat up. In addition because of many gross violations of the established norms for their maintenance the background radiation had increased several times over at the storehouses, which presents some danger to the health of the servicing personnel.

Nonetheless the Russian specialists believe that the situation is completely controllable and manageable. Proposals are now being prepared by joint efforts to "cool" the warheads and introduce the necessary order to the maintenance of the nuclear warheads. The conclusions of the specialists and designer-developers have been sent to the prime ministers of Russia and Ukraine for the appropriate decisions to be made at summit level. Here in brief is an account of what is happening.

On 14 September the nuclear specialists completed their work in Pervomaysk. But questions remain. And the first is why such a situation involving nuclear warheads could arise at all? Is it really that hard to understand, especially after Chernobyl, that it is criminal to play about with things like nuclear weapons and that no short-term advantages, especially political advantages, can be compared with the possible consequences?

As we know, an Agreement on the destruction of nuclear warheads has been signed at the level of the Russian and Ukrainian governments. According to this document, the nuclear warheads on Ukrainian territory should be transferred to Russia for subsequent dismantling and destruction at special enterprises. Even before, the Russian Federation Defense Ministry had frequently suggested moving these warheads to Russia. But the suggestions remained unanswered. And now a situation has formed in which the main designer-developers of nuclear warheads cannot answer for their safety. Nor does the Russian Defense Ministry have control over the state of nuclear warheads on Ukrainian territory. This situation arose after the Ukrainian parliament had enshrined in legislation the right of ownership of nuclear weapons. Moreover, despite repeated statements of its nuclear-free status, Ukraine has recently been creating nuclear structures which are themselves trying to operate nuclear warheads.

And the Ukrainian parliamentarians? Verbally they seem to agree to withdraw nuclear weapons from the state's territory. But here they fear that this may deprive

Ukraine of "great power" status. They say that the "nuclear mace" is essential to maintain international prestige! So can such an approach toward nuclear weapons be considered serious and responsible even to their own people, not to mention the world community?

We want to believe that the alarming events in Pervomaysk will push the politicians toward more considered and balanced decisions.

### Deputy Defense Minister Says Warheads 'Under Control'

PM1509173093 Moscow *IZVESTIYA* in Russian  
16 Sep 93 First Edition p 1

[Report by Vladimir Ivakhnenko: "Incident in Nuclear Munitions Store Due to Inadequate Supervision"]

[Text] Kiev—Yesterday *IZVESTIYA* reported an incident at a missile forces facility in the vicinity of the city of Pervomayskiy [as published].

In an interview for the UNIAN agency, Ukrainian Deputy Defense Minister Ivan Buzhan announced that, because an excessive number of nuclear warheads, detached from delivery vehicles, had been stored at the aforementioned 43d Army facility, the temperature did actually increase recently in the store by 1.2 degrees.

On discovering the deviation from the strict conditions, which require a temperature of between 18 and 20 degrees, military specialists took a number of steps to set the temperature at the required level. On the Ukrainian side's initiative a group of Russian nuclear scientists went to the facility and fully confirmed the reason that had been given for the change in temperature. It was established that the nuclear munitions had not been affected. The situation is now under control at the facility.

I. Buzhan claims that the main reason for the over-crowding at the nuclear munitions store is last year's Russian General Staff directive on disbanding the "S" facilities. Ukrainian Defense Minister K. Morozov suspended the directive. It is possible that by the end of this month all the "S" facilities earmarked for the storage of nuclear munitions will be functioning normally.

The Ukrainian deputy defense minister believes that Moscow is dragging its feet on the question of concluding an agreement with Kiev on guaranteed, manufacturer's supervision of nuclear munitions stationed in Ukraine.

At Ukrainian Prime Minister L. Kuchma's request, a joint working group has been set up to monitor the state of the facilities and improve their maintenance and the long-term storage of munitions.

### Experts Give Findings on Pervomaysk Nuclear Arsenal

LD1609153493 Moscow Radio Moscow World Service  
in English 1100 GMT 16 Sep 93

[Text] A group of nuclear weapons specialists from Russia has urgently visited the city of Pervomaysk, at the request of the Prime Minister of Ukraine, Leonid Kuchma. They found crude violations of the rules of keeping nuclear ammunition in the arsenals which remained in Ukraine after the breakup of the Soviet Union. It was also established that the radiation level in the storages increased several times and was not safe for the personnel. The specialists say, however, that the situation could be brought to normal and made corresponding recommendations. A representative of Russia's Defense Ministry, General (Yakovlev), said that one reason for the incident in Pervomaysk is that Ukraine, which has declared its nonnuclear status, has not yet handed over its nuclear weapons to Russia to be destroyed there.

### Minister of Defense on Trip to U.S.

AU1609091893 Kiev UKRAYINSKA HAZETA  
in Ukrainian No. 13 (26), 19 Aug-1 Sep 93 p 8

[Article by Colonel General Kostyantyn Morozov, Ukraine's Minister of Defense: "The Americans Did Not Put Pressure Upon Me, but Tried To Hear Me Out"]

[Text] At the invitation of U.S. Minister of Defense Les Aspin, following our meetings in Kiev on 6-7 June, a delegation of Ukraine's Ministry of Defense made a 5-day visit to the United States.

The objective of the visit was to hold meetings and negotiations at all possible levels, to explain the situation in Ukraine and in its Armed Forces, to divulge the reasons for our concern about Ukraine's security, to substantiate the need for providing us with timely assistance, and to establish personal contacts with representatives of the U.S. high military leadership.

The program envisaged holding talks at the U.S. Ministry of Defense on the problems of building Ukraine's defense and cooperation in this sphere, which is extremely important for us, and at the State Department—on the political situation in our country and relations with countries of the CIS and the world.

With a view to this, there were meetings with U.S. Vice President Mr. Gore, National Security Adviser Mr. Lake, Chairman of the Joint Committee of Chiefs of Staff Mr. Powell, Chief of Staff General Sullivan, command of the National Guard, Chief of Staff of the Air Force General Maffick, senators at the Capitol, and at the Atlantic Security Council, where I made a speech.

We had an opportunity to familiarize ourselves with the work of the U.S. Armed Forces national command post

and to take part in the presentation of a joint Ukrainian-American enterprise for reprocessing outdated munitions. We were able to meet with representatives of the Ukrainian community in the United States, visit the joint command of the Naval Forces and its subordinate combat units and control posts. We held several news conferences and meetings with journalists and publishers.

Those were very busy days filled with painstaking work. We were encouraged by the fact that, wherever we were and whoever we talked to, we felt a significant change in attitude toward our state, less pressure and more desire to sort out problems of our state's security that concern us.

On 27 July, an important event took place: Mr. Aspin and I signed a memorandum on cooperation in the sphere of defense between our ministries.

It is an important political document, which is a record of intentions and ways to achieve mutual understanding and cooperation in matters of defense. It forms a foundation for developing ties at the level of military building and for shifting our mutual relations to a practical sphere. On the basis of this document, it was agreed to create joint working groups that will study questions of building our Armed Forces and recommend trends for their reform and development proceeding from the experience already accumulated by the two states.

From now on, we are partners in the sphere of defense and military cooperation. This agrees with our intentions to integrate within European and world structures on multilateral and bilateral bases.

Such a turn in our relations creates favorable conditions for the United States to elaborate and implement genuine, and not just formal security guarantees for Ukraine, something which is, perhaps, the most important precondition for ratifying START-1 by our parliament.

The first step in this direction was the discussion at the State Department of the conditions for signing the "framework" agreement for receiving from the United States \$175 million for dismantling strategic missiles. This sum was not meant as a basis for full-scale dismantling, but only as an encouragement, so to speak, a starting sum, which may, logically, increase with the number of destroyed missiles.

We are now taking 10 nuclear installations with 60 warheads off combat duty. In accordance with the schedule, this work will be over by the end of September. Time will show what will come next. Ukraine has proclaimed itself as a nuclear-free state and this is stated in its military doctrine, which our parliament has, so far, failed to approve. We will firmly proceed along our course toward the total elimination of strategic weapons. However, Ukraine cannot resolve this problem on its own.

In order to eliminate the entire nuclear missiles arsenal that we have received as a legacy, we will need at least \$2 billion. Our talks in the United States, the cordial climate that prevailed at the meetings, and the memorandum give reason to expect that, in the future, Ukraine's economic and financial possibilities will be taken into account in resolving questions of expanding the aid.

It must be pointed out that, in the United States, we were not confronted with the question of ratifying START-1. They realize that the parliament is parliament, and it is its right to resolve such questions. The military must do their job. At present, 10 missile complexes are being dismantled in Ukraine. The warheads removed from them remain, under reliable protection, in our country to be used as fuel in the future. We are doing all of this on a unilateral basis and, so far, without any financial assistance. Therefore, there is nothing to censure us for. We are sincere and open to the world. That is why it hurts to find out that some people suspect us of secretly trying to decipher the secret codes that would enable us to retarget our missiles. Even THE WASHINGTON TIMES wrote about such revelations by the American intelligence.

All of these are groundless fabrications.

After I returned to Kiev, I read in UKRAYINSKA HAZETA of 5-18 August the information entitled "Belarus Has Already Ratified...." In it, Mr. Tsepkalo, adviser to the [Belarusian] Supreme Council chairman, sadly admits that his state no longer presents interest for the West. It had been promised \$65 million for dismantling and withdrawing nuclear weapons, but as soon as the parliament ratified START-1, the promises were forgotten. It is now the turn of "stupid" Ukraine.

What can be said here? First, I am not sure that what is written is really the case. Second, our parliament pointed out that it may adopt a decision to maintain a part of the nuclear arsenal. This will oblige our present partners to keep their promise.

Well, time will put things in proper order.

We are told: A memorandum has been signed with the United States, but not with Russia. I am in favor of signing such a referendum with our northern neighbor. However, here, a whole series of obstacles still need to be overcome. These are strategic forces, the Black Sea Fleet, and Sevastopol. Regarding Ukraine's security, we would say that it may be under threat when a policy of pressure, blackmail, territorial claims, interference into our internal affairs, and so on is pursued against it. Today, we are experiencing all of this from Russia. However, I am sure that our states will avoid serious complications. I am in favor of making every effort to establish normal relations between us. Efforts in this direction must not be stopped even for a moment. We need to consistently look for complete mutual understanding, which will lead to signing both treaties and memoranda. I personally have nothing against the idea of concluding a tripartite

agreement between Ukraine, Russia, and the United States on cooperation in the defense sphere.

During our visit to the United States, nobody touched upon the question of elaborating a scenario of combat actions in the case of a deterioration in the relations between Russia and Ukraine because the Security Council decision and the participation in it of the U.S. permanent representative give hope that problems that arise may be resolved in a political way.

Our present security is based upon this and upon our self-restraint. However, we must build our home's defense reliably and thoroughly, realizing that nobody will defend us if we don't defend ourselves.

The Pentagon offered us assistance in assimilating the experience of the American professional service, so that we could utilize everything useful in it for reforming our defense structures. Groups of experts have already started work in this direction. We are being reproached: You are establishing contacts with the American military, at the same time rejecting the idea of collective security involving CIS countries. What is the point here? It is simple: Independent states may join unions, but without having their armed forces subordinated to some superstate military structure. This is a road toward losing state sovereignty. It is a different matter if this is done on an equal basis, like, for example, with the U.S. Ministry of Defense. I am sure that the time will come when we will have similar relations with the Russian military. At the moment, we agree to a military-technological cooperation, because our defense enterprises are on the decline due to the absence of orders. We need assistance to enable us to stand on our own feet as soon as possible, to reform our troops, and see to it that they become smaller numerically and stronger in terms of weaponry and training. Today, it is extremely difficult to achieve this because of economic difficulties. The Ukrainian president was even forced to adopt a decision on downgrading the command and staff training. The press has already announced this. We will have to restrict ourselves to 2- or 3-day training aimed at establishing interaction between headquarters at all levels. Field training of regiments and battalions will take place in military districts in accordance with programs.

I admired the state of combat training of American servicemen. It is superb! I also happened to fly in their latest tactical fighter F-18, having made a flight landing on the deck of an aircraft carrier. Splendid technology. It was a great pleasure, all the more so since, at home, at my post, I am not allowed to fly, and I cannot violate this rule—the minister should not show a negative example.

Incidentally, with regard to American closed bases, aircraft, and aircraft carriers. Our delegation included General Oleksandr Skipalskyy, chairman of Ukraine's Officers Union. At that very same time, deputies Charodyeyev and Marchenko published critical material on him in the press, accusing the general of disclosing such secrets to the Americans that it only remained to initiate

a criminal case against him. We are still very much behind what we were shown in the United States. They disclosed to us such secrets that we could never dream of. Consequently, General Skipalskyy could not really "surprise" them with anything and did not disclose anything hitherto unknown. It is simply a pity that esteemed deputies displayed their incompetence and readiness to repeat other peoples' words.

Summing up my impressions of the trip to the United States, I will say briefly that it was not only my personal discovery of America but also a discovery of Ukraine for many American high-ranking military figures: First and foremost in that our state is not going to attack anybody, but that it will be able to defend its own land.

#### **U.S. Partner To Start 'Demilitarization'**

*PM0209120793 Moscow KRASNAYA ZVEZDA  
in Russian 28 Aug 93 p 4*

[Valeriy Baberdi report: "Ukraine Seeks Contacts, and Finds Them"]

[Text] The American company "Alliant Techsystems" (Minnesota) and the Ukrainian Defense Ministry have struck a deal to destroy tank weapons and artillery and mortar shells.

Under this agreement the American company will set up automated production lines to dismantle arms at two Ukrainian ammunition dumps. Here the ammunition will be taken apart mechanically or through the use of high-pressure water jets [gidromonitory]. The point is that a thin, high-pressure stream of water can cut through a shell without detonating the explosive device.

Equipment has already started to be delivered. It is expected that the number of personnel required to service the production lines will be in the region of 100 workers.

According to expert estimates (American and Ukrainian), the sale of copper, steel, brass, and aluminum scrap from the cases and components of the weapons could bring in an income of over \$100 million in the next 5 years. This will be split between the two partners.

For "Alliant Techsystems," a leading producer of torpedoes and tank shells for the Pentagon, this deal signifies entry into the small but growing international demilitarization market. Many military contractors in the United States, Germany, Japan, and Israel have studied this market in depth. It is their view that a chance does exist here to compensate to some extent for the cut in orders for arms.

#### **Supreme Council Official Says Nuclear Arms Necessary**

*LD120908479 ? Kiev UNIAR in Ukrainian 0720 GMT  
12 Sep 93*

[“Partnership With West Possible Under Condition of Nuclear Arms Preservation Only”—UNIAR headline]

[Text] Kiev, 11 September—Without nuclear weapons we cannot count on partnership with the leading Western countries. Such is the opinion of Yuriy Babansky, deputy chairman of the standing commission of the Ukrainian Supreme Council. According to him, at the very start of building our independence serious Western politicians, while anticipating the current situation with nuclear disarmament, were maintaining that without nuclear weapons our state could only be an object of pity. Today, under conditions of the disintegration of geopolitical forces, when separate states openly announce their territorial claims, nuclear weapons are a necessary attribute of Ukrainian statehood.

#### **Defense Ministry Studies Feasibility of Space-Missile Force**

*LD0309215293 Kiev UNIAN in Ukrainian 1955 GMT  
3 Sep 93*

[Text] Kiev, [no date as received]—According to a directive by Ukrainian Defense Minister Kostyantyn Morozov, a number of Defense Ministry and general headquarters directorates have launched an inquiry into the feasibility of setting up Ukrainian missile and space forces. The need for such an inquiry arose after Ukraine's armed forces inherited from the Soviet Army part of the USSR antimissile defense system, several land-based space surveillance stations, and two ships with a similar task, attached to the port of Odessa. Experts believe that these objects can be used in satellite communications, sea navigation, and meteorology. Cooperation with NATO or Russian systems would be necessary to use the technology for military purposes.

The results of the inquiry will be submitted to Ukraine's defense minister by 15 September.

#### **Expert on Ecological Aspect of START-I**

*WS1009110093 Kiev KIEVSKIYE NOVOSTI  
in Russian 3 Sep 93 p 3*

[Article by Gennadiy Selivanov, chief of the Military Activities Group at the Ukrainian Ministry of Environmental Protection: "Ready for Disarmament Only Theoretically"; first paragraph published in boldface]

[Text] Ukraine's geopolitical and strategic military situation was the main reason that caused decades-long deployment of large groups of military personnel, facilities, educational institutions, enterprises, and departments on Ukrainian territory. The high density of Army and Navy units and their activity, virtually beyond any control, have caused severe, sometimes irreparable damage to the natural environment. Despite the measures recently undertaken by the Ukrainian Ministry of Defense, the situation is not improving. The upcoming nuclear disarmament of Ukraine is riveting the attention of specialists and the general public.

Unfortunately, along with a significant portion of strategic nuclear forces of the former USSR, Ukraine did not

receive sufficient guarantees for safe maintenance and servicing within the framework of the CIS strategic nuclear forces. The measures taken by the president and the Defense Ministry to carry out the Almaty and Minsk strategic nuclear arms treaties found no practical implementation in Rocket Forces units because of political and technical reasons. This is why, Ukrainian people's concern over the security of nuclear missiles to be eliminated, seems natural.

The guaranteed exploitation periods of some missile systems expired this spring, which called for urgent technical measures for removing these missiles from an operational status and preparing them for dismantling. This had to be done before a political decision was made regarding the status of Ukraine as the state that came into possession of nuclear arms as a result of well known events. In this situation the military, as often happens in emergencies, reached an agreement much faster than the politicians. As a result of this, Ukraine financed a system that guarantees safe maintenance and servicing of missiles, and its normal operation was restored. This, in fact, enabled secure continuation of preparations for making necessary decisions on the fate of nuclear missiles in Ukraine.

At the same time, the situation should not be prolonged because the time factor exhausts the reliability resource of security systems. This factor has started to show already—this year, the resource of twenty missiles expires. Work on removing them from operation is currently under way.

It would be logical to believe that the Defense Ministry possesses a comprehensive program adopted at least at the governmental level, and that ministries and organizations involved in disarmament have started implementing this program in accordance with technically and ecologically safe technologies; that specially trained working groups, rescue crews, and systems, the necessary equipment, and the means of ecological monitoring are already in place at the facilities. One might believe that work schedules exist including loading, shipment, and unloading of the most ecologically harmful nuclear and fuel components of missile systems, and that laboratories are equipped with economically acceptable and ecologically safe technologies for processing, storing, and utilizing these components.

In other words, one might believe that by the beginning of the summer, the preparation and organization of work on eliminating the missiles were handled at the national level.

Unfortunately, Rocket Forces have nothing except their own scarce human and material resources. We should pay tribute to the foresight of some Ukrainian executive bodies. These include the Defense Ministry represented by the Center of Administrative Management of Strategic Nuclear Forces, the Ministry of Machine Building, and some other institutions that drafted a comprehensive program for eliminating nuclear arms in Ukraine.

The program was finally drafted, is professional from an engineering and ecology viewpoint, and envisages all the key problems and the means for resolving them.

However, thus far, these are just speculations. Hardly anyone in Ukraine can persuasively explain how the project will be carried out within the timeframe envisioned by the START-I treaty.

Nuclear missiles demand the simultaneous resolution of three intertwined problems—those of granting military, economic, and ecological security. These problems must be resolved in tandem with other issues, so vital to the young state.

In the opinion of some Defense Ministry experts, the elimination of nuclear missiles is a technically simple, although expensive process (preliminary calculations assess the cost at \$2.8 billion). What causes incongruity between the simplicity and the high cost of the process? The point is that the process of nuclear disarmament is impossible without resolving a lot of accompanying problems, especially grave in Ukraine's case.

The most important problems are: What to do with 1,200 nuclear warheads? What to do with the several thousand tonnes of missile propellant components, whose properties can be compared to strong chemical weapons? What to do with high tech and very durable launch silos? How to carry out risk-free shipments of the hazardous loads, their storage, and utilization? How to ensure the social security of retired missile personnel? How to make the best use of the facilities, infrastructure, and garrisons?

These, and many other problems in some way connected with work on eliminating the missiles, are so complex and costly that the Ukrainian economy cannot cope with them within the timeframe determined by the START-I treaty, without serious foreign financial and technological assistance. By the way, this is one of the reasons hampering the treaty's ratification by the Supreme Council.

I find it appropriate to bring up another serious reason. Under the provisions of the START-I, practical work on the mass elimination of nuclear missiles must begin within 30 days after ratification. Are we ready for this? I am sure that we are not.

At the same time, despite periodical reports by some incompetent mass media, there is no "direct threat of repetition of Chernobyl because of improper maintenance and control of the condition of nuclear missiles." Any expert, more or less competent in nuclear physics and nuclear arms, can confirm that military units equipped with nuclear missiles, will never repeat the fate of Chernobyl, given the existing system of explosion security.

Another issue is that, for various reasons, there is a possibility of increased radiation levels in nuclear weapons storages. Although the weapons are stored in

specially built shelters and for practical purposes they do not harm the environment, we do not believe that this can go forever. One of the high-ranking Ukrainian Defense Ministry officials was correct in saying that an attempt to accumulate nuclear warheads in "S" [strategic] facilities for undefined periods of time is like trying to hold a red-hot iron ball in your hands.

It should be mentioned that the problem of safe storage of more than 400 nuclear weapons left by the Air Forces of the former USSR and stockpiled at a few facilities, has not been solved thus far.

It means that not everybody, making such decisions, understands that nuclear weapons require not only a storage facility but also a complex maintenance service facility.

From an ecological aspect of nuclear disarmament, the problem of rocket propellant utilization seems even more bizarre. While a decision on oxidizers has already been made—its processing technology has been developed and there are appropriate production forces—scientists will have to resolve the heptane problem. Nevertheless, there are still no facilities for storing the rocket propellant components after removal from the missiles. There are no facilities that would provide technical and ecological safety until utilization is completed. To build new storehouses requires not only time but also huge expenditures. The solution rests with specialists and economists.

One should not forget about another very important factor: Many missile systems are located in considerably heavily populated regions of Ukraine, sometimes in the direct vicinity of populated areas. How can one provide safety for dismantling procedures, requiring almost surgical precision, under such conditions? How can we convince the people of the absolute safety of the dismantling work? Moreover, what if we must detonate the launch silos? Experts' data shows that one such explosion can destroy underground facilities within a 25-30 square kilometer range. To detonate using small charges means delaying deadlines and multiplying expenses.

Given the above, one can ask: Is it or is it not beneficial to the young Ukrainian state to ratify disarmament treaties and, immediately after, to begin dismantling work? Additionally, it is quite obvious that to destroy nuclear weapons at our own expense, while keeping all deadlines, means getting into such a mess that only a dream about an independent state will be left.

Terms and deadlines of disarmament treaties might not only create social disturbances, but also technical and ecological disasters. One cannot forget about the diminishing responsibility, efficiency, technological discipline, lack of training and experience in missile system maintenance, as well as the psychological element, such as the well-known belief that it is easier to destroy than to build.

Missile systems are already being withdrawn from combat duty and, eventually, nuclear disarmament has been presumed. Because of that, it is essential to finally resolve the issue of financing dismantling programs. As of today, the budget does not provide for it. Further procedures might be delayed. Enthusiasm is not enough for disarmament. This is number one.

Second. Scientific and technical teams for the development of safe dismantling and utilization procedures should be assigned to clear-cut tasks and obliged to implement them on time. Real circumstances, not imaginary intentions and wishes, should be considered, and financing methods should be provided immediately.

Third. It should be suggested that the Ukrainian Defense Ministry abort the faulty manner—a Soviet Army legacy—of concealing the presence and means of storing and maintaining the most dangerous weapons, nuclear and fuel components of missiles, and other hazardous military equipment. The time has come to make an inventory and to submit the results to the Ukrainian legislative bodies.

Fourth. Taking into account that the process of dismantling and withdrawing expired missile systems from combat duty has already begun, it is expedient to create universal emergency systems and supply them not only with equipment necessary for the elimination of the aftermath of possible accidents, but also with early warning systems. This includes ecological situation monitoring systems and communication equipment.

Fifth. It is necessary, in our opinion, to establish a command and scientific center—or some other coordinating body—for the nuclear disarmament of Ukraine. It should employ specialists and officials from all related ministries along with independent experts.

Today, it is evident that this kind of work requires government awareness, control and strict centralization, flexible leadership, and openness. Today's priority seems to be the evaluation, consideration, and diagnosis of all possible political, economical, technological, and ecological situations, approaches, and expenditures.

## REGIONAL AFFAIRS

**UN Space Authority To Move to Vienna**

*AU1309095193 Vienna NEUE KRONEN-ZEITUNG  
in German 13 Sep 93 p 13*

[Unattributed report: "UN Space Authority Will Soon Move to Vienna"]

[Text] After New York and Geneva, Vienna remains the most important seat of the United Nations. This was agreed in a personal meeting between Vienna Mayor Helmut Zilk and UN Secretary General Butrus Butrus-Ghali. The UN space authority will soon move to Vienna.

Because of the departure of the UN Social Committee, Vienna was afraid of losing its importance as one of the three official UN headquarters.

Mayor Zilk succeeded in dispelling these fears during his meeting with Butrus Butrus-Ghali in New York.

"Vienna will lose some jobs but it will win the space authority," Zilk stressed.

## AUSTRIA

**Austria To Become Member of Geneva Disarmament Conference**

*AU1609134793 Vienna DIE PRESSE in German  
16 Sep 93 p 1*

[("a.w."-signed report: "Austria To Join the Disarmament Conference")]

[Excerpt] Vienna/Geneva—In the future, Austria will participate in the Geneva Disarmament Conference on the basis of equal rights. This was decided in mutual agreement during the talks on the expansion of the conference. Vienna has been trying to obtain membership for 10 years. However, as DIE PRESSE learned from the Foreign Ministry, the whole expansion scheme can only be realized if the United States gives up its veto.

The United States is against Iraq participating in this body. Whereas the West used to consider Iraq's integration in the Disarmament Conference as a useful measure against Baghdad's armament program, Washington now wants its total isolation. It is not yet clear whether the United States will give in or whether Iraq will be excluded. However, an abandonment of the expansion plan is not considered likely. The Disarmament Conference used to have 39 members. It lost two as a result of the changes in Eastern Europe. A total of 23 members are now to be accepted. [passage omitted]

## FRANCE

**Defense Minister Warns Nation Could Resume Nuclear Testing**

*AU1209171893 Paris AFP in English 1636 GMT  
12 Sep 93*

[Text] Paris, Sept 12 (AFP)—Defence Minister Francois Leotard warned Sunday [12 September] that France would resume nuclear testing if government-appointed experts raised doubts over the credibility of its nuclear arsenal.

In an interview with the France-2 Television channel Leotard said testing would resume if the impending report by a government commission of experts on nuclear trials called into question the credibility of France's nuclear force. The report's finding will remain secret.

Leotard said the commission had specifically been asked to address that issue.

"If the answer is yes we must resume (testing)," he told the television channel, adding General Charles de Gaulle's dictum: "Count only on ourselves when the defence of France is at stake."

If the answer was no, France would continue to honour the unofficial worldwide moratorium on testing, he added.

But whatever the response, France needed to close a scientific gap with Russia and the United States in the field of nuclear weaponry and to acquire swiftly the necessary simulator technology to bring about a definitive end to testing.

## GERMANY

**Foreign Minister Welcomes Ukraine Nuclear Weapons Agreement**

*LD0309164393 Hamburg DPA in German 1529 GMT  
3 Sep 93*

[Text] Bonn (DPA)—Federal Foreign Minister Klaus Kinkel has welcomed the agreement on the future of the nuclear weapons located on Ukrainian territory. He attaches far-reaching importance to the agreement. He hopes that the solution found will be implemented speedily and comprehensively. "Worldwide nuclear disarmament and nonproliferation have taken an important step forward," Kinkel said. Ukraine's stance deserves recognition. The decision will play an important role in future cooperation between Ukraine and Germany and other Western states, he said.

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